

# *Lexism: Beyond the Social Model of Dyslexia*

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## **Abstract**

In this thesis a new concept called 'Lexism' (the Othering and discrimination of dyslexics) is proposed, outlined and defended. The dyslexia debate is currently in a state of deadlock. The origin of this stalemate is not an empirical problem but a conceptual one. The conceptual problems with dyslexia, and the existence of dyslexics, are both recognised, but the contradictions between them remain unresolved. For this reason a philosophical approach (influenced by Ludwig Wittgenstein and Gilbert Ryle) has been adopted. First, the conceptual foundations are set out to enable the recognition of Lexism as a concept, and to reject the concept of dyslexia whilst recognising the existence of dyslexics. Second, Lexism as a concept, is evaluated, compared and contrasted with what some might consider to be the strongest existing account of dyslexics' social experiences, that of Riddick's (2001) social model of dyslexia. Third, the key aspects and features of Lexism as a new concept are set out. The original contribution to knowledge is that Lexism enables us to see that dyslexics are defined by Lexism not dyslexia. Lexism, it is argued, in a certain sense, is comparable to, though not the same as, racism, sexism and homophobia. This enables us break the current deadlock and move away from sterile debates over dyslexia's existence, to how dyslexics are Othered by a literate society. Lexism raises new and significant implications for the dyslexia debate, but also government policy, educational practice, assessments and reasonable adjustments for dyslexics.

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## **Introduction**

In this thesis I engage in concept formation, the creation of a new concept that I call 'Lexism'. That is: the Othering and discrimination of dyslexics through normative practices and assumptions of literacy. Lexism, I suggest, is similar but not the same as racism, sexism and homophobia. It is recognised that those with average or above average intelligence, yet poor reading acquisition and spelling difficulties, exist (see for example, Rice with Brooks, 2004). We may call such individuals dyslexics or use another term or phrase. For the sake of clarity throughout this thesis I use the word 'dyslexic'.<sup>1</sup> Therefore as dyslexics exist, the question then becomes, why do dyslexics exist? Is it because of a neurological condition or impairment called dyslexia? Alternatively, do dyslexics exist for some other reason or reasons? Dyslexia itself is a highly contested concept, yet those who reject dyslexia as a concept, because they view it is unhelpful, do not deny the existence of those with literacy difficulties and average or above average intelligence (Elliot and Grigorenko 2014). Criticisms of dyslexia, I argue throughout this thesis, are well founded. I suggest that Lexism is a simpler and clearer way to recognise the existence of dyslexics, without recourse to the concept of dyslexia. In other words, a dyslexic is defined by Lexism, not dyslexia.

We could consider the current academic debate on dyslexia rather like a chess board that has reached stalemate. The numerous pieces on the board cannot move, for neither side can win the argument. As Bishop (2014) notes several authors, such as Stanovich (1994), and most recently Elliot and Grigorenko (2014) reject dyslexia as a concept, yet the concept retains its

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<sup>1</sup> I do not use the phrase 'people with dyslexia', I reject the term dyslexia (or any equivalent term) so as such this phrase would be meaningless. I am dyslexic myself, I am more comfortable with the word 'dyslexic', and hence use that word throughout. I have reflected on my positioning in Collinson, Dunne and Woolhouse (2011), and Collinson and Penketh (2013).

currency and every attempt to overturn it has so far failed to be accepted. Dyslexia as a concept is retained because dyslexics (or whatever term one wishes to use) clearly do exist, and so those who seek explanations for the existence of dyslexics are inexorably drawn back to the concept of dyslexia. My purpose in this thesis is to craft a new and significant concept to break this deadlock. Lexism is a new chess piece, so to speak, which I have created to fulfil that purpose. Within this thesis I have also sought to place Lexism on the chess board, as it were, in the most appropriate manner in such a way that ends the stalemate. However, I am not aiming for one side to win or lose the argument, rather I am seeking to provide an alternative way of seeing the information we already have, and in doing so break the stalemate.

## **Rationale**

My rationale is to provide a way of seeing dyslexia and dyslexic identity for my fellow dyslexics which is emancipatory, yet conceptually rigorous. My purpose is to enable my fellow dyslexics to see that dyslexia is an unhelpful concept; to encourage dyslexics to abandon dyslexia as a concept, and enable them to assert new forms of self-reference not reliant on that concept. I also wish to provide them with an informed choice. First, they may choose to retain the self-reference as 'dyslexics' but be defined by Lexism, and thereby assert a new sense of identity which is not limited by the concept of dyslexia. Second, they may choose to reject both the terms dyslexic and dyslexia and adopt new nomenclature of self-identity. Currently, as acknowledged by Rice with Brooks (2004), there is a tension within the dyslexia field between emotive lobbying by dyslexia advocacy groups and contributions from evidence-based researchers. The intellectual problem, I would suggest, is not a scientific one, it is conceptual and political; it is within the realm of

the social, not the scientific. It is this problem that I wish to address, to bridge the gap between advocacy and evidence; this can only be done through conceptual clarity.

However, evidence-based researchers need to grasp that the emancipatory nature of this area of research means one cannot just dismiss the beliefs of dyslexia advocacy groups as emotive reactions which should be overruled with 'evidence'. Rice himself suggested that the terms dyslexia and dyslexic should be abandoned (Rice with Brooks, 2004). The problem with this suggestion is that though abandoning dyslexia as a concept is desirable, it goes against the deeply held beliefs of many dyslexics themselves; it would then have to be *imposed*. My own reaction to Rice's suggestion that we abandon the term dyslexic (rather than just 'dyslexia') was irritation. I reject Rice having any right to tell me what *my* mode of self-reference should be. I suspect my reaction would not be atypical of many dyslexics. The problem is how to enable dyslexics and dyslexia advocacy groups to accept the conceptual problems of dyslexia (and be willing to abandon the concept of dyslexia), yet at the same time enable researchers to see that dyslexic modes of self-reference should be respected. In short, to retain the concept of dyslexics and dyslexic self-reference, yet reject dyslexia.

Separating being dyslexic from dyslexia is an important conceptual step forward. However, someone might argue that one cannot separate dyslexia from being dyslexic in the same way one cannot separate redness from something that is red. However, the key features of 'dyslexia' are based on the failure to meet expectations within certain psychological predicates: reading, spelling, and remembering. As Bennett and Hacker, (2003: 100, emphasis in original) argue:

psychological terms are not names of psychological properties, acts and activities *in the sense in which* "red" can be said to be the name of a colour

property, “to wave” can be said to be the name of an act, and “to dig the garden” can be said to be the name of an activity.

We should not therefore confuse psychological predicates with colour words as if such things are comparable; ‘Robert can read’ is not like saying ‘the door is red’.

Bennett and Hacker (2003: 100) put it thus:

it is not wrong to say that “pain” is the name of a sensation, or that “anger” is the name of an emotion. But this masks deep logical differences between being the name of a colour and being the name of a sensation, or between being the name of an act or activity and being the name of a so-called mental act or mental activity.

These ‘deep logical differences’ can also exist *within* our use of colour words.

Travis (2006: 42-43) draws our attention to the logical difference between something being said to be ‘blue’, like a lake on a sunny day, and something else being blue in colour (let us say a door which is painted blue, for example). Both can be said to be ‘blue’ but the phrase ‘the lake is blue’ and the ‘door is blue’ have different meanings; for if one took a bucket of lake water from the lake it would not be blue.

Therefore Bennet and Hacker (2003: 101-103) draw distinctions between our use of words like colour, and psychological predicates, such as being in pain, wanting, believing, and intending. Bennet and Hacker (2003) draw out the ‘logical differences’ in expressions relating to these different psychological predicates to show how different they are from each other (and our use of colour names).

Someone might argue at this juncture that there is a key difference between dyslexia (as a neurological disorder in the brain), and the act of reading, spelling or remembering as done by human beings. As a consequence someone might think that I am confused by treating dyslexia as difficulties in reading, spelling and remembering, whereas dyslexia is a distinct thing. However, ‘dyslexia’ is ascribed to someone based on their behaviours, not something ‘in the brain’; it is a

conceptual confusion to believe dyslexia can be ascribed by a brain. As Hacker (2010: 306, emphasise in original) argues psychological predicates (such as reading and spelling) cannot be ascribed to brains any more than we can ascribe ‘the property of *flying* to the engine of an aeroplane.’

The criteria for the ascription and diagnosis of dyslexia are behavioural (difficulties with reading, spelling and remembering) and not neurological data. It is a conceptual confusion to think behavioural criteria for the diagnosis of dyslexia are *symptoms* of the underlying neurological condition (called dyslexia). The behavioural criteria are not like the symptoms of a stroke because in the case of a stroke the condition (the stroke) *just is* a neurological matter properly diagnosed on the basis of examining what has happened in the brain of the individual who has suffered the stroke. The ultimate warrant for diagnosis of a stroke is neurological, whereas the ultimate warrant for the diagnosis of dyslexia is behavioural. If someone displayed the neurological features that we took, on some putative theory, to be dyslexia, yet did not display the behaviour characteristics, they simply would not have dyslexia.

As a consequence, I argue that one cannot separate the act of reading, spelling or remembering (in the sense of failing to meet social norms) from dyslexia. Throughout this thesis I highlight that dyslexia is not a thing, but an inability to meet the social expectations associated with psychological predicates such as reading, spelling or remembering. As such we should not be confused by an apparent similarity in our language use between colour words (as an example) and psychological predicates. As Bennett and Hacker (2003: 100-101) argue:

there are important logical differences, obscuring their profoundly different uses, and occluding the distinctive ways in which they are taught and explained in our common practices.....the word “pain”, for example, does not stand to the sensation pain as the word “red” stands to the colour red.



The 'important logical differences' that Bennet and Hacker refer to mean that we *cannot*, logically, say that separating dyslexic and dyslexia is like trying to separate redness from something which is red. Redness is not a valid object of comparison for a psychological predicate such as reading, or a failure to read to expected standards. As Bennett and Hacker (2003: 101) conclude, psychological predicates and colour words are 'of quite different logical categories, they are used quite differently, and we teach or explain their meaning in a quite different manner.'

If a dyslexic says 'I am dyslexic' but rejects the existence of dyslexia, this is not a contradiction. For in saying this, the dyslexic is saying 'I am X' (dyslexic) but is *actively rejecting* Y (dyslexia) as inherent in defining X; rather, he (in this case me) is asserting a new Y (Lexism) as the defining factor. The dyslexic, unlike an object, is a human being with agency and can create a new meaning. The word 'dyslexic', in the sense of an ordinary language use, has no inherent meaning that determines it must be associated with dyslexia. Dyslexic as a word is only reliant on dyslexia for meaning in a technical sense. If, however, one rejects a technical meaning, because one rejects dyslexia as a viable concept, one can embrace a meaning based on an ordinary language use of 'dyslexic'; the concept of dyslexic has thereby become detached from a technical meaning and use. The assertion that dyslexics are defined by Lexism, by its very nature, is a creative process. It is an expression of my own agency, and a rejection of the intellectual authority of psychology to define who or what *dyslexics* are (as opposed to dyslexia). The word 'dyslexic' in this thesis, therefore, has a new meaning (concept) associated with it which is based on an ordinary language use, subtly but significantly different to the technical meaning which psychologists (or indeed the dyslexia lobby) might give it.

In arguing, as I do, that dyslexics are defined by Lexism, not dyslexia, I am *de facto* seeking to *dissociate* the term 'dyslexic' from 'dyslexia'. I acknowledge that if one rejects the concept of dyslexia one is also rejecting that we can coherently or logically use the phrase 'a person with dyslexia'. However, if dyslexia is not a thing, and therefore not a helpful concept for us to define dyslexics, there *are still individuals* who struggle to meet the functional expectations of literacy and have a range of intellectual abilities. Difficulties in meeting socially constructed norms of literacy, however, are difficulties only in certain social contexts, and such difficulties are therefore context sensitive. There are three choices for academics: first, to *impose* a new term upon dyslexics which has some form of academic consensus; second, to reject any naming for this group of individuals; third, to accept whatever term that this group chooses for itself. As my purpose is emancipatory I adopt the third of these choices.

For two reasons, however, I continue to use the term 'dyslexic' throughout this thesis. My reasons are as follows. First, for the sake of clarity to identify the group of individuals I am referring to, by the term *they are currently known by* and second, to use the term by which *they most frequently refer to themselves*. It may be that dyslexics *themselves* choose a new term, continue to use the term dyslexic, or, reject any collective term. I myself, as a dyslexic rather than a philosopher, prefer to continue to use the term dyslexic. However, ultimately (and at some point in the future), the decision on the collective nomenclature for this group of individuals rests with that group. The consensus would need to be established, through the assentation of self-reference, by their ordinary and everyday language use. It cannot be imposed by any professional body; to argue otherwise *would be contrary to my emancipatory purpose* in writing this thesis.

If I were to argue for *my personal preference* of retaining the term dyslexic I would do so as follows. As dyslexics are conscious agents with thoughts, beliefs, intentions and wishes, we have the capacity to choose our self-reference; which includes the ability to choose the term used to refer to ourselves. If ‘dyslexics’ were unconscious objects without agency they could only be defined in the terms of ‘dyslexia’. Yet this is not the case; dyslexics have agency and have resisted the changes in terminology which professionals have sought to impose. As a comparison consider the nature of the ordinary language use of race and country in the medieval period within England; one’s *race was English*, one’s country was one’s *county*. Conscious agents can, and do, change what such terms mean over time. Part of my emancipatory aim is also to assist dyslexics to become more assertive and active agents. The term dyslexic enables a level of clarity and group identity needed to be more assertive, and its retention is therefore for practical and political purposes. I am seeking to remove the psychological and technical foundation of the term dyslexic and to assert an ordinary language use of the term.

### **Research Focus and Questions**

Reading later chapters of this thesis might lead someone to assume that I am critiquing the ‘discrepancy model of dyslexia’ (using IQ as part of the diagnostic criteria of dyslexia). However, the ‘discrepancy model’ of dyslexia has been critiqued and problematised (Sigel and Hemel, 1998). My ‘target’ (so to speak) is not the discrepancy model of dyslexia, nor indeed is it dyslexia, it is what lies behind such concepts – namely, I suggest, Lexism. The belief in intelligence’s role in literacy acquisition is such that it remains an important feature of Lexism. Average or above average IQ continues to form part of the inclusionary criteria of equivalent technical terms to dyslexia, such as the American Psychiatric

Association's (APA) (2013: 66) definition of 'Specific Learning Disorder'<sup>2</sup>. As I am concerned with what lies behind dyslexia as a concept, this includes *any* equivalent psychological term. I merely use 'dyslexia' as a short hand for those equivalent technical terms which include Specific Learning Difficulty (SpLD) in UK terminology, and Learning Disabilities (LD) in US terminology. Both SpLD and LD, however, are inclusive technical terms for dyslexia and other similar 'impairments'.

It has long been argued that dyslexia is of biological origin, the characteristics of which interact with the child's environment (see for example, Frith, 1999). However, how explanations located at a biological level (neurological and genetic), link to or interrelate with the cognitive level (specific processing deficits) and the behavioural level (poor reading and writing) remains unclear (Frith 1999, Elliot and Grigorenko 2014). Frith's (1999) three-layered explanatory account, includes these levels but the gaps between each layer are significant. Both Frith (1999) and Rice with Brooks (2004) have acknowledged that the field of dyslexia is in 'chaos'. This is partly due to the different terms employed, which can include dyslexia (such as SpLD and LD) as well as the wide range of what constitutes the exact inclusionary or exclusionary criteria. Elliot and Gibbs (2008) argue this has resulted in wildly different estimates for the number of dyslexics in the population. Furthermore, Elliot and Gibbs (2008, 2012) and Elliot and Grigorenko (2014) have continued to attack the concept of dyslexia as incoherent.

As the focus of this thesis is the creation of a new concept (Lexism) and, to a lesser extent the critiquing of an existing concept (dyslexia), my approach is conceptual not empirical. Therefore I adopt philosophical methods and

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<sup>2</sup> 'Dyslexia', as more narrowly defined by some, since the 1990s, is no longer seen to require average or above average IQ to form a diagnosis (see for example, Smythe et al 2005, Elliot and Grigorenko 2014).

approaches, drawing on Wittgenstein's *Philosophical Investigations* (PI)<sup>3</sup> (2001), Gilbert Ryle (1949) and other philosophers influenced by Wittgenstein and Ryle. My methods include thought experiments (hypothetical what ifs) and the employment of objects of comparison (comparing and contrasting exercises). I test the new concept of Lexism against what I consider to be the strongest existing explanation for the social experiences of dyslexics, that of Riddick's (2001) social model of dyslexia. Riddick's model is a significant influence on MacDonald (2009a and b, 2010a and b, 2012); who has outlined an important move towards the sociological study of the experiences of dyslexics.

My three research questions are as follows:

- 1) What are the features of Lexism as a concept?
- 2) To what extent are the features of Lexism different, and similar, to Riddick's social model of dyslexia?
- 3) To what extent is Lexism a clearer concept to explain the existence of dyslexics than dyslexia?

## **Origins of Lexism as a Concept**

The concept of Lexism as set out in this thesis arose from a number of personal experiences and reflections on those experiences. I briefly outline them here to provide context for the reader. Those experiences led me to read and conceptualise existing historical, theoretical and philosophical texts in a particular way, for a particular purpose. Namely, I sought to understand what it is to be dyslexic. I was unsatisfied with existing accounts of dyslexia; was I dyslexic

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<sup>3</sup> Throughout this thesis I adopt the standard method in contemporary philosophy for referencing Wittgenstein's *Philosophical Investigations* by the number of the remark not the page number. I use the standard way of referencing a remark of Wittgenstein as PI § and then the number, and remarks plural as PI §§ and then the numbers.

because of something in my brain (dyslexia) or did dyslexic identity (and thereby my sense of being 'dyslexic') exist for some other reason? This was a reoccurring thought long before I began the research for, and writing of, this thesis. From childhood I noticed that other aspects of my own personal traits, such as my difficulty with numbers, were less likely to inspire intolerance than admitting to difficulties with reading and spelling. To make such an admission left me open to prejudice and contempt, I was confused why this should be. After all, I thought, my difficulties with numbers are, if anything, greater than that with words and letters, yet it was for a difficulty with literacy that I experienced prejudice and contempt. As I grew older I became more aware of such social interactions, and increasingly puzzled by them.

Whilst I was an undergraduate studying Ancient History and History, I became more aware of several important contextual factors. First, how non-literate societies were portrayed by ancient writers as barbarous, savage, uncivilised and irrational. This, I learnt, was what ancient historians refer to as a Classical topos; a literary theme repeated, often to demonstrate ones' education and learning. Second, that mass literacy is a recent development. To talk of literacy and ignore historical changes in its social norms would be, I began to realise, to place literacy outside the historical context in which we are all, ultimately, situated. I began to be uneasy with the concept of dyslexia itself, for it seemed as a concept to be ahistorical.

The ancient topos of societies which were non-literate being savage and irrational led me to reflect on my early experiences of school; of experiences of ostracism relating to literacy acquisition. My own self reference as a dyslexic was not based on a belief in 'dyslexia'; nor was it based on a failure to meet

expectations of literacy. Rather, what it is to be dyslexic, I increasingly realised, was based on being treated and viewed as unacceptably different – as the ‘Other’. Like the ‘Barbarians’ of the Ancient world, dyslexics, I came to realise, are identified and experience prejudice and hostility precisely because of our society’s culturally acquired beliefs and attitudes towards literacy.

Although I had rejected ‘dyslexia’ as the basis of my self-reference as a dyslexic, I had accepted (at that time), that there are differences, of some description, between the brains of non-dyslexics and dyslexics. However, as I read more on the history of literacy, it became increasingly problematic for me to reconcile those contradictions. The phrase ‘person with dyslexia’ made less and less sense; especially when one considers language use such as ‘so and so suffers from dyslexia’. Dyslexia is not a disease, nor does it cause pain, how then could I suffer from it? I experienced hostility and discrimination because I am dyslexic, and this could on occasion cause me distress. However, it was what occurred in other people’s minds that caused me to ‘suffer’, not anything intrinsic to me. I reflected on the fact that someone of African descent does not ‘suffer’ prejudice because of their skin colour, but because of racism. Likewise a woman does not ‘suffer’ discrimination because she is a woman, she ‘suffers’ because of sexism; similarly someone who is gay does not ‘suffer’ hostility because of their homosexuality, they ‘suffer’ because of homophobia. The problem does not exist within or as part of them, but as an aspect of the beliefs of others around them.

I began to consider that there might be another ‘ism’ related to the existence of dyslexics and the experiences with which we are regular faced. ‘Dyslexia’ as an explanation was inadequate to explain my experiences, or those of other dyslexics. Yet I had still not fully rejected ‘dyslexia as difference’; it was

only through reading, further reflection and discussion during the writing of this thesis that I was able to eventually shed the last vestiges of the belief that there was some form of difference in my brain that made me dyslexic, and which was the same as other dyslexics, and dissimilar to non-dyslexics. This essentialist view of defining dyslexics by dyslexia was a particular form of puzzlement. The first tentative steps to challenging this essentialist belief were taken whilst writing an article in which I sought to highlight the historical context and ethical issues surrounding dyslexic identity (Collinson, 2009). Fiona Hallet kindly read and commented on this article and she pointed out that I was 'very Freireian', I was, however, unaware of Paulo Freire's work; her comments led me to read Freire.

Freire was concerned with the education of the less literate or non-literate in the third world as a means of social justice. *The Pedagogy of the Oppressed* (Freire, 1970), perhaps his most famous work, especially, seemed to provide an important analytical framework to compare the situation experienced by dyslexics. In many places in the *Pedagogy of the Oppressed*, I often considered that one could almost just replace the word 'oppressed' with 'dyslexic'. In reading Freire's (1970, 1974, 1992) work I begin to see special educational provision in a different way. As a form of what Freire (1970: 36) called 'false generosity', that is, paternalism which is enacted to further the self-interests of the paternalists rather than those they claim to assist. Freire (1970) refers to the oppressed as engaging in self-oppression, and I began to see that dyslexics engage in self-oppression in their willingness to accept the dyslexia label. I began to see the dyslexia lobby, especially organisations such as the British Dyslexia Association and Dyslexia Action, as part of the problem, not part of the solution. Arguably, such professional associations of dyslexia specialists form elites which engage in 'false generosity'; they have professional and financial self-interests in the status quo. However



politically enabling Freire's work was, it did not provide conceptual clarity for me in terms as to how I might understand 'dyslexia' as a concept.

Reading and reflecting on Foucault's (1975, 2002) work enabled me to further critique this professional self-interest. It also enabled me to see the dyslexia debate as a dominant discourse; in Collinson and Penketh (2010) we referred to it as a dominant lexic discourse ('lexic' being a term used by some dyslexics to refer to non-dyslexics). However, again, this only allowed me to go so far in critiquing the dominant discourse of dyslexia, which I began to call 'Lexism' (Collinson, 2012). I first used the term 'Lexism' as part of my contribution to a joint article (Collinson, Dunne and Woolhouse, 2011). In that article I also drew on the work of Gramsci (1970). Both Foucault and Gramsci emphasise the importance of recognising the historical context of existing social beliefs, norms and expectations which influence how individuals and societies view the world. Foucault (2002) referred to this as the 'archive' and Gramsci (1970) as 'common sense', or commonly held beliefs. Gramsci, however, is a much clearer and more concise writer than Foucault, and it was Gramsci rather than Foucault that influenced my thinking more, as Lexism as an idea developed. However, again, as with Freire, this brought me no closer to understanding 'dyslexia'. I was beginning to discern the concept of Lexism, but for Lexism to be fully realised I needed to reject dyslexia, to recognise that dyslexia itself is a Lexist concept. At this stage, I remained puzzled and it was then that I turned to the work of Wittgenstein.

Wittgenstein's *Philosophical Investigations* (2001, ed.) is an incredibly dense and difficult text, yet I found his work rewarding. My own reading of Wittgenstein's work is that he questions grand theories; instead he focusses on detailed cases to enable us to see when such abstractions might be unhelpful.

Wittgenstein encourages us to consider the nature of intermediate cases – specific cases which do not entirely fit definitions and narrow ways of seeing. I myself, as a dyslexic who reads widely and often, would appear to be an example of such an intermediate case. Reflecting upon this, and the nature of the history of literacy, led me to question a number of possible intermediate cases - specifically where someone might be ‘dyslexic’ in one time, place and context but not another. It was this reflection that led to the thought experiment ‘Three Dyslexics and a Time Machine’ (as set out in Chapter 8). Wittgenstein’s focus on the importance of context (the specifics of the case) led me to explore different contexts within my thought experiments. In doing so, I began to see that there was no essence of what a dyslexic is within their biology.

Identifying someone as dyslexic, I realised, is based on the failure to meet social norms of literacy in a given context, a specific case in a specific time and place. In realising this, my conception of my own dyslexic identity changed from believing in some sort of inherent difference to a difference that only exists, is noticeable, and remarked upon because of the social context that creates it. In short, I began to believe in a normative difference, not a nomological difference between dyslexics and non-dyslexics. Furthermore, having read Freire, Foucault and Gramsci I had begun to see this as an ‘ism’. In some respects, reading Said’s (1978) *Orientalism* enabled me to ‘come full circle’ so to speak. Said’s work provided a means to compare Lexism with another ‘ism’, Orientalism, which I examine in detail in the last chapter of the thesis. I began to see parallels between Orientalism and Lexism, but also to understand how I might use Wittgenstein’s approach. My use of Wittgenstein’s work is apparent, and expanded upon, in the first three chapters of the thesis.

## **Thesis Structure**

This thesis is divided into three parts. In Part 1 (chapters 1 to 5), I set out my conceptual foundations. These include relevant concepts, as well as assumptions and practices we might associate with Lexism as a concept. I set out my philosophical approach, the value of the philosophy of education and conceptual problems associated with dyslexia. In Part 2 (chapters 6 to 10), I examine and critique Riddick's social model in detail. I identify three key aspects which I examine in turn: first, the Othering and discrimination of dyslexics; second the influence of cultural factors of Othering and discrimination; and third, dyslexia as an impairment. In Part 3 (chapters 11 to 14), I set out and explain the philosophical and societal aspects of Lexism, and describe different ways of seeing Lexism.

In Chapter 1 I focus on the distinctions one can draw between words, concepts and conceptions (or ways of seeing). I suggest that Lexism is a new concept that enables us to engage with new conceptions of dyslexics and dyslexia. My purpose in Chapter 1 is to lay out the conceptual foundations by which to develop Lexism as a new concept. I note the role of the philosopher in clarifying conceptual confusions that may arise from those distinctions. I provide an example of different ways of seeing by considering homosexuality. I examine conceptions of 'literacy' and 'literate' which can result in Othering. I explore two rival conceptions of dyslexia within the historiography of dyslexia as a science. I argue for a particular conception of normative literacy, and conclude that one can be good or bad at literacy, but not impaired in it (excluding a case such as not being able to see the page).

In Chapter 2 I focus on how I envision the concept of Lexism. I compare Lexism to other similar social phenomena, such as racism and sexism. I emphasise the different normative assumptions, beliefs and practices associated

with Lexism and compare this to other similar social phenomena. I provide a number of hypothetical cases of how *some* of the social experiences of dyslexics might be thought of as Lexism, I avoid categorising Lexism as *only* a prejudice, and instead I seek to show the variety and complexity of the phenomenon (strictly speaking, phenomena). I also argue that we should consider dyslexia to be a deeply held belief by which dyslexics can make sense of their dyslexic identity.

My methodology and approach is a philosophical one, and this forms the focus of Chapter 3. I set out the relevance of the philosophy of education, and emphasise the importance of philosophising (doing philosophy). I set out three methodological problems posed by definitions of dyslexia: first, a general problem with definitions of dyslexia (see for example Rice with Brooks, 2004); second, a specific problem identified by Stanovich (2005); third, problems with definitions themselves identified by McFee (2004). I indicate philosophers who influence my approach, such as Wittgenstein and Ryle. I employ objects of comparison and thought experiments throughout the thesis, so I explain what those methods consist in.

In Chapter 4 I critique the belief that dyslexia can be located in the brain. I argue reading is an action, and it is done by human beings in a particular context. I explain what is known as the mereological fallacy (Bennett and Hacker, 2003) and consider its relevance to reading. I propose two thought experiments, 'evil genius', and 'An Alternative Present' to forward by arguments. I apply my understanding of Wittgenstein's (PI §§ 150-173) remarks on understanding and reading to further develop my critique of dyslexia.

In Chapter 5 I suggest that the desire to define dyslexia (or any literacy related disorder) can reveal features of Lexism. I propose a thought experiment,

the 'Dyscomputics' in which I highlight how social beliefs and educational priorities operate to mislead a fictional society into defining difficulties with using computers as a disorder. Social beliefs and educational priorities create a desire for a definition, I examine the criteria used by the World Health Organisation's (WHO) (1994), and American Psychological Association's (APA) (1994 and 2013) definitions of terms equivalent to dyslexia. I then apply my arguments from the thought experiment to those WHO and APA definitions.

In Chapter 6 I critique Riddick's (2001) social model of dyslexia, and I develop this critique further in Chapters 7, 8, 9 and 10. I identify three key aspects which distinguish Riddick's model: the discrimination and Othering of dyslexics; the existence of 'cultural' factors which impact on the 'disability'; that dyslexia is an 'impairment' which is not socially constructed. I highlight and define the three key aspects, drawing on Riddick's text, and I also problematize Riddick's model and her use of 'impairment'.

In Chapter 7 I focus on the Othering and discrimination of dyslexics. I put forward a thought experiment, 'The Twins', to question the idea that there is a clear distinction between a disability (as a form of Othering) and impairment (as a form of dysfunction). I assess current literature on the sociology of dyslexia and draw upon theoretical insights from Policy Archaeology and New Literacy Studies.

In Chapter 8 I focus on the cultural (both historical and non-historical) factors that impact the social construction of the disability associated with dyslexia. I argue that there is a 'temporal problem' in seeking to define dyslexia. That is, what defines someone as meeting a norm of literacy, or failing to do so, depends on the norms of the place and time in which they were born and not their neurological or biological limits. I use a thought experiment, 'Three Men and a

Time Machine', to highlight the temporal problem through examples. I emphasise how historical and non-historical factors impact upon this problem. I examine historical material which is relevant to the temporal problem, and examine the conceptual problem of the 'biologising' of dyslexia and literacy.

In Chapter 9 I consider to what extent dyslexia is an impairment. I critique the two alternative possible foundations of an impairment: first, one based on biology, and, second, one based on function. I propose a thought experiment, 'The Cannae Rememberers'. I do so to highlight that 'dyslexia' conforms to the purposes of the elite. I also examine the work of Stanovich (1994) and Elliot and Gibbs (2008) who reject the concept of dyslexia, and suggest that their arguments are significant.

In Chapter 10 I use the work of Ryle (1949) as the basis to suggest an alternative view to the social model of dyslexia. I explain what the intellectualist doctrine is (Ryle, 1949) and why it is of importance. I highlight the distinction Ryle makes between knowing *how* (forms of intelligence or understanding not reliant upon propositional knowledge) and knowing *that* (propositional knowledge). I apply this distinction to dyslexics, and use hyperlexics as an object of comparison for dyslexics.

In Chapters 11 and 12 I classify Lexism's philosophical (i.e. conceptual) and societal aspects, respectively. In Chapter 11 I classify aspects that are primarily conceptual in nature (philosophical). I explain the conceptual confusion within Lexism, as well as scientific, educational and folk-psychology-based aspects of Lexism. In Chapter 12, I focus on the societal features of Lexism: first, socio-historical context; second, government and bureaucratic reactions; third, practical

and ideological aspects of literacy practices; fourth, the social consequences for dyslexics.

In Chapter 13 I offer an alternative conception of dyslexia and dyslexics. I provide a visual model of understanding the relationship between social constructions of literacy and the biology of the dyslexic. I employ drapetomania (a nineteenth century pseudo-scientific explanation for why slaves in the American Deep South ran away) as an object of comparison for dyslexia. I employ Oralism (the prejudice against the deaf which repressed the use of sign language) as an object of comparison for Lexism, with regard to the introduction of penalties for spelling, grammar and punctuation.

In Chapter 14 I provide Said's (1978) critique of Orientalism as an extended object of comparison for Lexism. I highlight the key features of Orientalism which are similar to, but not the same as, Lexism. I highlight Lexism in terms of what Said calls a 'limitation on thought' - that is, a series of attitudes and beliefs which constrain what can be thought, or, it is socially acceptable to say or act upon. I argue that Riddick's social model is a partially successful attempt to free us from Lexism as a 'limitation of thought'. I consider how Said defines different forms of 'power' (political, cultural, intellectual and moral). I apply these definitions of power to how we might understand Lexism.





## **Part 1: Conceptual Foundations**

In Part 1, I set out the conceptual foundations for both Lexism and my reply to Riddick's social model of dyslexia. In Chapter 1, I consider how we might begin to think about normative literacy, and make distinctions between what we mean by words, concepts and conceptions. In Chapter 2, I explain how I envision Lexism, first in the abstract by comparing it to racism, sexism and homophobia, then I present specific hypothetical cases of Lexism and draw out key features to illustrate how I envision the concept. In Chapter 3, I consider the nature of the Philosophy of Education and the problems with definitions, I also explain my philosophical methods, which include thought experiments and the employment of objects of comparison. In Chapter 4, I consider the mereological fallacy (assigning psychological predicates to the brain and not the human being) as applied to reading and dyslexia. In Chapter 5, I critique the problem of trying to define dyslexia; focusing on the World Health Organisation's (WHO) and American Psychiatric Association's (APA) attempts to define literacy difficulties as named psychological conditions.

## **Chapter 1 Words, Concepts and Conceptions**

### **Introduction**

In this chapter I focus on the words, concepts and conceptions relevant to this thesis, I do so to seek conceptual clarity. I argue that Lexism as a new concept enables us to engage with new conceptions of dyslexics and dyslexia. It is important, therefore, to clarify the distinction between words, concepts and conceptions. My purpose is to lay the conceptual foundations by which to develop Lexism as a new concept, and provide a solid basis by which to explore new conceptions of the concepts of being 'dyslexic' and 'dyslexia'. This thesis is one located within the philosophy of education. Philosophers of education are largely concerned with *conceptions* of education, rather than the *concept* of education (Winch and Gingell, 2004). The concept of education is relatively simple; conceptions (our ways of seeing or defining what education is) are, however, problematic and complex. In assessing conceptions of education, literacy, being dyslexic and dyslexia, I am therefore engaging in the philosophy of education.

The structure of this chapter is as follows: in the first section, I outline the differences between words, concepts and conceptions and why this is significant. I note the role of the philosopher in clarifying conceptual confusions that may arise from those distinctions. In the second section, I explore conceptions, also referred to as 'pictures' and 'ways of seeing'. I provide an example of two ways of seeing (or conceptions), of homosexuality, as a parallel case for dyslexia. In the third section, I examine three examples of similar conceptions of 'literacy' and 'literate' which Other the non-literate or less literate. Those conceptions of literacy are, I suggest, the particular conceptions of literacy which lead us to become conceptually confused by the existence of dyslexics. In the fourth section, I

examine the historiography of dyslexia as a science to explore two rival conceptions of dyslexia. In the fifth section I outline the distinction between the normative and the nomological, and emphasise the importance of literacy as a social good. In the sixth section, I outline what I mean by the phrase normative literacy.

### **(1.1) Words and Concepts**

In this section I explain the difference between words and concepts. Words are linguistic entities, parts of our language, whether written or spoken. Spoken they are a series of sounds (or a sound); written they are letters in a recognised order. Both spoken and written words have different concepts associated with them. It is important to note that natural languages use the same word for different concepts, and that concepts are distinct from words. For example, the French word *chat*, the German word *katze*, the Spanish word *el gato* all have different letters and sounds associated with them, but all convey the same concept as that conveyed by the English word *cat*. A word can also have a number of different concepts associated with it, for example *chair*: first, the piece of furniture for one person to sit on; second, the person who runs a meeting; third, an alternative name for the office given to an academic when they become a professor. As Hacker (2013) notes, concepts are ways of using a certain range of words, and the same word could be part of a range of words for more than one concept.

Concepts, as we use the term, are not functions, but ways of using a certain range of words. Many of our concepts are indeed vague, and none the worse for that. Commonly, that is exactly what we want. The requirement for sharpness of definition is far removed from our practices of explanation of word-meaning and completely at odds with our communicative needs.

(Hacker, 2013: 141).

Problems can arise, however, when we become confused by different concepts associated with the same word. These are referred to as conceptual confusions because it is the different possible concepts (and not the word) about which we become confused. Such conceptual confusions are significant, and it is the role of the philosopher to seek to clarify those conceptual confusions.

As an example let us consider some words, concepts and a third notion, namely conceptions, associated with education (teaching and learning). The *word* literacy has two commonly related *concepts*: first, that related to reading and writing, and second, proficiency in something, such as 'IT literacy'. Our *conceptions* of what reading and writing, and 'IT literacy' are, and how those should be defined, valued, and understood, are, however, complex. Let us consider some words, concepts and conceptions associated with the concept of 'Education'. Winch and Gingell (2004: 6, emphasis added) note that the '*concept* of education refers to preparation for life. A particular *conception* of education, however, refers to a particular kind of preparation for life.' Furthermore, we might add that a conception of education is a preparation for a particular kind of life, or even, a particular preparation for a particular kind of life. Conceptions of education are therefore highly contested (Winch and Gingell, 2004). Education might be viewed as being taught something in a particular manner. Teaching can also be associated with other words which might be used to explain it as a concept such as Andragogy (the teaching of adults) or Pedagogy (the teaching of children). Alternatively, such words and concepts, might suggest different styles of teaching for different purposes, such as mentoring, coaching or training. 'Learning', likewise, can have different concepts associated with it: rote memory; developing understanding; knowledge creation.

Furthermore, there could be rival conceptions of what ‘teaching’ *should* entail, based or focused on what kind of learning you value, why, and in what context. For example, rote memory (the concept) when valued above, or instead of knowledge creation and understanding, may form the basis of a *conception* of teaching and learning focused on didactic instruction. In contrast the concepts of developing understanding and knowledge creation can be associated with a dialogic approach to teaching and learning when valued above, or instead of rote memory. Freire (1970, 1974, 1992), for example, provides us with a complex *conception* of education based on the rejection of didactic instruction (the ‘Banking model’) and the assertion of the dialogic facilitation of learning. Likewise, the *concepts* of Andragogy and Pedagogy may simply be the teaching of adults and children, respectively, yet they may also have complex and varying conceptions associated with them. I set out these distinctions in the below table. I frequently use matrices or tables when seeking to clarify my points in later chapters. (The first number indicates the chapter to which the table belongs; the second number identifies the specific table itself.)

**Table 1.1 Words, Concepts and Conceptions associated with Education**

Word	Concept	Conceptions
Teaching	Andragogy/Pedagogy Mentoring/Coaching/ Training	Didactic instruction Dialogic facilitation of learning
Learning	Rote memory Developing Understanding Knowledge creation	Didactic: based on rote memory. Dialogic: focused on developing understanding

		and knowledge creation
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To illustrate *one* role of the philosopher of education, consider this hypothetical case; a society exists in whose language the *word* for a bicycle literally translates as ‘metal-pony’, the word for the handle bars is the ‘head’ of the ‘pony’, the pedals are the ‘stirrups’, and the wheels are the ‘legs’. Someone teaching a child to ride a bicycle in this language might give instructions such as ‘keep your feet in the stirrups’, ‘turn your pony’s head’, ‘if you try to keep your pony’s legs straight you won’t wobble as much.’ The *words* may be the same as those for teaching someone how to ride a horse; but the *concepts* associated with those words are those connected with learning to ride a bicycle. Importantly, in that context (the hypothetical society), they would be understood as such. A conceptual confusion in such a society *might* arise in terms of *conceptions* of how you might teach someone to ride a bicycle - that to teach someone to ride a horse is like teaching someone to ride a bicycle *because the words are the same*. However, we can see in this example that the concepts associated with those words are different and should not be confused.

A philosopher in such a society might choose to point out this confusion and seek clarity. A horse is a living and conscious animal, it does not need to be kept in balance by its rider in the same way a bicycle does; to ride a horse and to ride a bicycle require different skills and have to be learnt in different ways. The philosopher would need to emphasise the difference between the *concepts* in the case of the bicycle and the horse, and encourage someone not to be confused by the fact that the *words* happen to be the same. In our own society a similar issue can occur in confusing what a human being does when they are ‘thinking’, with a

computer processing code. For example, if someone says ‘the computer is thinking about it’ and genuinely believes the ‘computer thinks’. In fact, it is a loose use of language; a computer does not ‘think’; it processes information (which is only *information* for humans) in the form of binary code. Human thought is not the same as a computer processing data. Someone who believes that it is the *function* that is important might say ‘yes, but the function of a computer and a human in thinking is broadly the same’.

It is important to distinguish between a concept and conception here; for in suggesting that a computer ‘thinks’, they have developed a *conception* of thinking (rightly or wrongly) which includes not only human beings, but computers. Consider again, however, the ‘metal-pony’. The *function* of riding a ‘metal-pony’ (bicycle) is broadly similar to a horse, to ride from point A to point B; but we would not claim that ‘to ride’ a horse is the same as ‘to ride’ a bicycle. The words ‘to ride’ here are the same, and the concept is *similar*, but it is not the same in each case. Likewise, when the human being thinks, this is not the same, and should not be confused or conflated with what we say when we say ‘a computer is thinking’. The alternative views of thinking I have set out are rival *conceptions*: ways of looking at the same concept or choosing to define that concept in a particular way for whatever reason.

## **(1.2) Conceptions, Ways of seeing and ‘pictures’**

Within this section I outline my understanding of conceptions; which I also refer to as ‘ways of seeing’ and Wittgenstein (2001) refers to as ‘pictures’. When I use the phrase ‘way of seeing’ (‘picture’ or conception) I am not using this as a technical phrase, merely as shorthand for a way of seeing a feature of the world in a particular way. Standish (2012: 61) provides the example of witchcraft; he refers

to the belief in witchcraft as something which is not easy to detach 'from the prevailing world-view'. Witchcraft in medieval Europe was 'the basis of explanations, the means by which explanation was possible' (Standish, 2012: 61). When we recognise witchcraft to be ridiculous we do so not because we have new information but because we have accepted an alternative basis of explanation; we have a different way of seeing the world, a different conception of how the world works. Likewise, I suggest normative literacy cannot be separated currently from the prevailing world-view; both normative literacy and witchcraft are ways of seeing the world, conceptions or 'pictures'. If we recognise dyslexia to be questionable not because we have new information but because we have accepted an alternative basis of explanation; it would be because we understand Lexism as a concept (and the influence of normative literacy upon us), and this allows us to develop alternative conceptions. A psychologist might choose to object to this comparison. A parallel case may be useful to us at this juncture; how in the 1950s and 1960s psychologists and psychiatrists held a particular conception of homosexuality.

Such psychological accounts of homosexuality are now rejected, not because we have new information, but because society changed, and with it our way of seeing homosexuals. In short, we were offered what Wittgenstein (2001) refers to as an alternative 'picture'. Wittgenstein (2001) in referring to St. Augustine's 'picture' of language, notes that:

These words, it seems to me, give a particular picture of the essence of human language. It is this: the individual words in language name objects – sentences are combinations of such names. – In this picture of language we find the roots of the following idea: every word has meaning. This meaning is correlated with the word. It is the object for which the word stands.

(PI § 1)



A 'picture' here is a particular conception of language; St Augustine holds an essentialist view of language. Wittgenstein throughout the PI offers us what Baker (2004: 269) calls 'counter-pictures', to enable us to see that this essentialist conception of language is too simplistic. Likewise, the concept of Lexism provides a starting point to create a 'counter-picture' to that of dyslexia.

In the case of dyslexia, a longstanding conception or 'picture' is that which Stanovich (2005: 104) calls the 'discrepancy assumption'. Stanovich (2005) identified three features of dyslexia, or Learning Disability (LD), in North American nomenclature. First, difficulties with word recognition, and second that this is related to difficulties with phonological coding (being able to distinguish and use the sounds within language). Third, both those features can be alleviated with appropriate teaching. He acknowledges that all were correct, however, Stanovich (2005: 104, emphasis in original) notes that '*none of these facts correlate at all with IQ!*' We may view dyslexia (a normative theory), as a 'picture' or way of seeing dyslexics, and likewise Lexism as a different way of seeing dyslexics (or a 'counter-picture'). An example of a 'picture' and 'counter-picture' is how homosexuality has been viewed as first, a kind of aberration, and then, a standard variation.

The Diagnostic and Statistical Manual (DSM) of the American Psychiatric Association (APA) is the 'Bible' of many of those who work in mental health (Mayers and Horwitz, 2005). The DSM I (APA, 1952) and the DSM II (APA, 1968) both define homosexuality as a psychiatric disorder (see also Schacht, 1985). In 1973 the APA Board of Trustees voted to remove homosexuality from the DSM (Schacht, 1985). A 'special note' was inserted in the seventh printing of DSM II in 1974 acknowledging that the APA no longer asserted that homosexuality was a

psychiatric disorder (Mayers and Horwitz, 2005). DSM III (APA, 1980) was a significant shift away from psychiatry towards psychology, but as Mayers and Horwitz (2005: 251) note 'no new knowledge led to the new paradigm' nor for whether one defined homosexuality as a disorder or not. The change occurred because the gay rights movement forced change on the APA alongside public pressure and changing societal attitudes (see, for example, Schacht, 1985, Mayers and Horwitz, 2005). The empirical information was unchanged (Mayers and Horwitz, 2005); the way of seeing homosexuals, however, had changed, or had been successfully challenged (Schacht, 1985). This provides us with an important example of a way seeing (a conception or 'picture') which might be comparable to existing ways of seeing dyslexia and dyslexics.

I would suggest that we need no new information to understand being dyslexic; we need a different way of seeing, a new conception derived from the new concept of Lexism. In the case of homosexuality the basis of explanation in DSM I and II was psychiatry (APA 1952, 1968). In the case of witchcraft the superstition of medieval people is obvious to us (Standish, 2012). Likewise, with hindsight the homophobia of the psychiatrists who drew up DSM I and II is now obvious to us; even if this particular way of seeing is within living memory. In both cases it is a different way of seeing (rather than new information), that enables us to perceive witchcraft as a superstition and homosexuality as merely a sexual difference. In the cases of psychiatry and witchcraft both are the basis for explanation; information is incorporated into that existing way of seeing (see for example, Standish, 2012). We should, I suggest, also seek a new way of seeing dyslexia as a theory (or perhaps a family of theories) to explain the existence of dyslexics. A new way of seeing dyslexics (a new conception) would enable us to

see that dyslexics are those Othered by societal norms of literacy. To clarify my explanation I set out my keys points in a matrix below.

**Table 1.2 Ways of seeing**

Way of Seeing	Basis of Explanation	That which is seen
Lexism	Psychology	Dyslexics
Homophobia	Psychiatry (APA, 1952, 1968)	Homosexuals
Medieval Superstition	Witchcraft	'Witches' or unexplained phenomena.

### **(1.3) Conceptions of Literacy and being Literate**

In this section I consider conceptions of literacy and of being literate which, by their very nature, Other those who are deemed less literate. Wittgenstein (2001) in PI §1 gave the example of St Augustine's 'picture' of language as an example of a widespread conception of language. I adopt a similar approach: first, I examine Millender's (2001) description of ancient Athenians' conception of literacy, which conflates literacy with citizenship and progress. Second, I outline Gibbon's (1776) conceptions of literacy and being literate as the foundation of rationality. Third, I examine Scribner's and Cole's (1981) description of the conception of literacy that assumes a link between literacy and intelligence. Those three accounts are *examples* of certain conceptions of literacy. Those who hold such conceptions mistakenly view non-literate or less literate individuals and societies as inferior, uncivilised, less rational and backward (see, for example, Bowman and Wolf, 1994, Pagden, 2001, Draper, 2004). Like Wittgenstein (PI: §1), I am not concerned with an empirical point, such as how widespread the

conception is, or, who holds it; rather, my concern in later chapters is to highlight why it is problematic. Here, I merely point to its existence.<sup>4</sup>

Millender (2001) argues that in the ancient Athenian conception of literacy, there is an association between illiteracy and backwardness. Millender (2001) demonstrates how ancient Athenian writers fraudulently claimed that the Spartans were illiterate, and directly because of this, the Spartans were therefore inferior. Millender (2001) notes the growing ideological importance of literacy in Athens, from the fifth century B.C. onwards, as a means of self-identity. Millender (2001: 156) also gives an interpretation of this process

Similarly to those who both today and in the past have identified literacy with civilisation, progress, and rationality, Athenians of this period attached much ideological importance to literacy as a natural and necessary concomitant of their democracy. In turn, illiteracy, as a sign of political and cultural backwardness...became the possession of Sparta.

The concept referred to by the ancient Greek word *agrammatos* (and Latin *illitteratus*), is vague, and can be translated as both 'incapable of reading and writing' and 'uncultured' (Harris, 1989: 5). Aristotle (see for example, Harris, 1989: 6) even goes so far as to use *agrammatos* to mean animals that are unable to articulate sounds.

Gibbon (1776) provides an example of a *conception* of literacy as the foundation of rational thought<sup>5</sup>. Gibbon draws on Tacitus' *Germania* to provide the basis of his description of the early Germans in his first volume of the *Decline and Fall of the Roman Empire*. For Gibbon (1776: 222), there was an 'immense distance between the man of learning and the *illiterate* peasant' (emphasis as in

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<sup>4</sup> In Chapter 7, I discuss New Literacy Studies, whose proponents argue for a conception of literacy as a wide range of culturally constructed social practices; not as a single set of skills or techniques (Street, 2005, Gee 2009). I adopt a conception of literacy which is similar to that of New Literacy Studies.

<sup>5</sup> A theme which dates back to antiquity; see for example, Heather (1994) for a discussion of the assertion made by Late Roman orators that that the Romans were rational due to their Classical literate culture, whereas the barbarians were irrational because they lacked this literate culture.

the original). Gibbon (1776: 222) argues that the illiterate peasant 'surpasses, but very little, his fellow-labourer the ox in the exercise of his mental faculties.' In other words, the less literate were animal-like, less human in their *rational* ability than their literate counterparts. If the distance between a scholar and an illiterate peasant was 'immense', the 'same, and even a greater difference will be found between nations than between individuals' (Gibbon, 1776: 222). Gibbon (1776: 222) asserts that the 'use of letters is the principal circumstance that distinguishes a civilised people from a herd of savages'. This is Gibbon's *conception* of literacy.

Gibbon (1776: 222), however, also has a conception of literacy as a form of social memory, a bank of propositional knowledge. He argues that without literacy:

the human memory soon dissipates or corrupts the ideas intrusted to her charge; and the nobler facilities of the mind, no longer supplied with models or with materials, gradually forget their powers: the judgement becomes feeble and lethargic, the imagination languid or irregular.

For Gibbon, this is the difference between literate and non-literate societies as well as individuals. This, he argues, is an 'important truth'; for the scholar 'by reading and reflection, multiplies his own experience' whereas the peasant is limited to his everyday experience. Gibbon's conception of literacy therefore is a social practice which develops human capacities and intellect; literacy here is the *foundation* of rational thought.

Those long standing cultural conceptions of literacy's link to intelligence, progress and rationality (such as that of ancient Athens and Gibbon) has been eloquently summed up by the anthropologists Scribner and Cole (1981: 4-5)

The social repercussions of literacy in modern history appear self-evident. Less prominent but of even earlier origin are claims for the psychological repercussions of literacy. These underlie deep-seated popular notions equating literateness with intellectual ability. As literacy shapes culture, the argument goes, so it shapes human minds. A simple version of this argument appeals to the growth of the mind that results from the

assimilation of knowledge and information transmitted by written texts. More radical is the claim that mastery of a written language affects not only the content of thought but also the processes of thinking how we classify, reason, remember. According to this view, writing systems introduce such basic changes in the way individuals think that we are justified in speaking of not only literate and preliterate societies but of literate and preliterate people.

What Scribner and Cole describe above can be thought of as particular conceptions of literacy, similar to both ancient Athens and Gibbon. They identify the claims for the psychological repercussions of literacy, and therefore how we value it, normalise it and judge those who fail to meet its norms. As Scribner and Cole note, 'popular notions equating literateness with intellectual ability', these are examples of an important conception of literacy, and are related to the 'discrepancy assumption' that Stanovich (2005) highlights.

#### **(1.4) Rival conceptions: the historiography of dyslexia**

In this section, I briefly outline the historiography of the scientific history of dyslexia as an example of two rival conceptions of dyslexia. One conception views the scientific history of dyslexia as progressive science, the other critiques this view. The *word* 'dyslexic' currently identifies to the concept of someone who 'has dyslexia', or is 'a person with dyslexia'. The concept of being dyslexic here, therefore, is reliant on the concept of dyslexia. The *word* and the concept of dyslexia originated in Germany in the 1870s, although this concept initially referred to acquired difficulties with literacy and memory (see for example, Miles and Miles, 1996, Campbell 2011, 2013). The *concept* of dyslexia or 'word blindness', however, as a developmental or 'congenital' disorder began in Britain with Pringle-Morgan's study of the boy 'Percy' in the *Lancet* in 1896 (Miles and Miles, 1996).

The history of dyslexia as a 'science' has been discussed by numerous authors (Wierdholt, 1974, Kamhi, 1992, Richardson, 1992, Miles and Miles, 1996, Brooks, 1997, Pickle, 1998, Anderson and Meier-Hedde, 2001, von Euler 2002,

Armstrong, 2002, Artiles 2004, McPhial and Freedman 2005, Soler, 2009, and Campbell 2011, 2013). This historiography can be divided into two rival *conceptions*. First, scholars taking a pro-science conception who believed in an optimistic progressive development of the study of dyslexia and other 'Learning Disabilities' (see for example Miles and Miles, 1996, and Brooks, 1997). Dyslexia in this conception of its history is something that exists in the brain, and was discovered by medical practitioners. In this conception, dyslexia was established as a concept to provide remediation for those defined as 'having dyslexia'.

The second conception is put forward by scholars adopting a post-positivist conception of science, some of whom draw on disability studies and/or the writings of Foucault (see, for example, McPhial and Freedman 2005, Soler 2009, Campbell, 2011, 2013). Dyslexia in this conception of its history is created to reinforce professional elites, or used to Other and label those deemed to 'have dyslexia'. In this conception, it is argued by Campbell (2011, 2013) and Soler (2009) that the concept of dyslexia arose from a certain set of preconditions - the need for a literate work force in combination with the growth of psychology as a discipline (see, for example, Campbell, 2011, 2013). I hold a third conception of the history of dyslexia; that dyslexia's creation as a concept both challenged and reinforced normative literacy. It challenged normative literacy by asserting, with scientific evidence, the existence of dyslexics; a clear rejection of the belief that the less literate are merely stupid. Dyslexia's early medical investigators, however, reinforced normative literacy by making the claim that dyslexics had some form of abnormality or illness which required a cure.

My conception of dyslexia, by contrast, is that it is a *normative theory* (or family of normative theories), as dyslexia has many rival definitions and conceptions (Rice with Brook, 2004). Dyslexia as a normative theory leaves

numerous socially constructed normative assumptions and practices of literacy unquestioned or unchallenged. In contrast, Lexism, I argue, provides the basis for a different conception of who dyslexics are, and what dyslexia is. There are umbrella concepts which include dyslexia, such as Specific Learning Difficulties (SpLD) in UK terminology, and Learning Disabled (LD) in US terminology. The concepts SpLD and LD (which include unexplained literacy difficulties) are equally as normative as dyslexia. However, the concept of Lexism enables us to create new conceptions of how we might understand dyslexia (SpLD and LD) as a normative theory or theories. My alternative conception of dyslexia is that is a theory that justifies and reinforces normative assumptions and practices of literacy by seeking to explain those who are exceptions to those norms as having some form of disorder. In other words dyslexia itself is a Lexist concept.

### **(1.5) Norms, Normative and the Nomological**

In this section I clarify what I mean by 'normative' and 'social norms'. An important aspect of the dyslexia debate historically was the tendency by the early investigators to treat dyslexia as a nomological matter rather than a normative one; I would wish to emphasize this distinction for the sake of conceptual clarity. I will also stress that in some contexts the normativity of literacy has positive consequences. I would not wish the reader to assume that normative literacy is the 'villain of the piece', so to speak. It is the misapplication of the conception of normative literacy which is problematic. For the purposes of this thesis I draw on Winch's (1998) conception of, and distinction between, the normative (social norms, expectations and rules of expected behaviour) and the nomological (natural laws, such as those in Physics). Language itself, not just written language, is normative. Winch (1998) argues that the word 'normative' can be used to



express social rule-following. Rule-following, and being trained in rule following, is an important aspect of how children learn, especially of how they learn their native language (Winch, 1998). Normative language practices and assumptions are therefore incredibly useful and positive in many cases and contexts. They enable us to learn our native language, and communicate with others, with both the spoken and the written word. I accept and build on Winch's use of the word 'normative', but acknowledge that there are other uses of the word.

Winch (1998) uses the term 'normative' not just to mean social rule-following, but also the process for the acquisition of those social rules. As a contrast, Winch (1998: 40) gives an example of 'non-normative' learning; he suggests that learning to walk is 'non-normative', though he qualifies this by acknowledging 'our ways of walking....are prone to cultural variation.' Winch (1998: 33), whilst critiquing Rousseau's account in *Emile*, argues that it:

is only within the nexus of correction, encouragement, approval and resentment that young human beings learn to become followers of societal norms. These sorts of primitive 'animal' interactions form the basis of our introduction to the normativity that characterises human society....These normative practices constitute the authoritative backdrop of normative behaviour....Rousseau's denial that such exchanges can be beneficial not only excludes Emile from the possibility of growing up and learning in a society that is in any way normal, it precludes him from growing up in a society that is recognisably normative; i.e. human at all.

For Winch, then, the 'normative' can be 'beneficial', and a fundamental part of a human society. The normative in Winch's account 'characterises human society'. I use 'normative' in this manner, but I am principally concerned with when such normative attitudes lead to Othering and discrimination.

Other philosophers than Winch, when using the terms 'normativity' or 'normative', can mean positive behaviours related to morality and ethics (see for example Sosa and Villannueva 2005). This use and meaning is similar, but not

exactly the same as Winch's. However, sociologists also use 'normative', again in a similar way to Winch's use of the term. Roberts (2009: 184), for example, defines 'norms' and 'normative' in a sociological sense thus:

A rule or looser shared expectation, backed by positive or negative sanctions, that governs human behaviour. A norm may not be statistically typical, but the usual effect sanction is that rules are followed and very likely internalised. Behaviour which complies with rules and expectations is called 'normative'.

Similarly, Green and Johns (1966: 45) refer to norms as 'a statement of expectation, requirement or demand concerning the behaviour of a social actor.'

The critical psychologists Moghaddam and Studer (1997: 186), emphasize: 'normative systems involve norms, rules and other cultural characteristics that help prescribe correct behaviour for people in given settings'. The terms 'normative' and 'normativity' can be applied to numerous social expectations and practices, from the legal system (Raz, 1980), to asexual behaviour (Carrigan, et al 2014). Furthermore, norms can be distinguished between proscriptive norms (requiring an abstinence or avoidance of a particular activity), and prescriptive norms (expected behaviour). Prescriptive norms (behaviour which people are expected to follow), include 'the goals they are expected to achieve and the means by which they are to pursue them' (Green and Johns, 1966: 45). Literacy can be thought of as having prescriptive norms associated with it; the 'goal' of being educated through the 'means' of literacy, or perhaps, the 'goal' of being literate through the 'means' of education.

Literacy's positive aspects are numerous, and we can understand these as normative. Literacy is a social norm, and as such it is a normative set of practices and assumptions, and its function as a social good is usually beyond question. These social goods include its role in education, culture, scientific progress, and

social coherence. Mass literacy's role, in combination with printed books, has ensured widespread education and literary culture. Without literacy there is no Shakespeare, no poetry, plays or great works of literature. One could argue that scientific progress from the Enlightenment onwards was reliant on literacy, in both how its findings were recorded and disseminated. This scientific progress (everything from medicine, and the healthcare associated with it, to satellites and space travel) was built on the foundations of literacy. Without literacy it is difficult to imagine the functioning of the rule of law, the judiciary, the democratic political system and other forms of social actions and practices which aid social coherence. However, these positive aspects of literacy are normative in nature; they are based on shared social values and beliefs, not natural laws (the nomological).

It is reasonable to argue that both literacy itself, and indeed the normative features of literacy, are incredibly useful. I acknowledge those positive aspects, however, in the remainder of the thesis I am concerned with negative consequences of the normative features of literacy; what we might call the 'side effects' of literacy. This might appear to be a contradiction; however, I would argue that literacy's very usefulness can lead us not to question possible consequences of its uses. Part of the problem, I suggest, is that, historically, literacy was treated as if it were nomological, rather than normative; that the relationship between literacy and intelligence reflected some natural law. This cultural inheritance retains a subtle but important influence on the dominant educational discourse; this tendency is retained to a certain extent, I would suggest, precisely because literacy is so useful.

Normative literacy is neither a negative, nor, a positive thing *per se*. The usefulness of norms and literacy (and norms associated with literacy) should not be underestimated. However, this very usefulness led the early investigators of

dyslexia astray, leading them to the thought that written language use is related to some sort of natural law; that is it is nomological. Recognising literacy as a set of normative practices and assumptions does not mean, however, that all such normative features are positive in all contexts for all people. The concept of normative literacy should be seen as a neutral term; the positives are acknowledged but I wish to draw the reader's attention to the negative impact on our understanding of what it is to be dyslexic throughout the remainder of the thesis.

### **(1.6) Normative literacy**

In this section I set out my conception of normative literacy and its relationship to Lexism. The concept of Lexism in simple terms is: normative assumptions and practices in relation to literacy which Others and discriminates those who do not meet those particular norms. Those that it Others and discriminates against are frequently called dyslexics. Therefore, when I use the phrase 'normative literacy' throughout this thesis, I need to be clear what I mean. In one sense literacy by its very nature is normative, a norm within our society; I do not mean that. Rather, I mean that particular practices and assumptions of literacy are used as normative criteria for formally assessing levels of education and intelligence, and informal, every-day judgements. These include reading at a certain speed and accuracy by a certain age, being able to spell accurately by a certain age, and meeting other arbitrary thresholds in similar literacy based tasks. This does not just apply to formal testing, but also informal everyday judgments about people's intelligence based on their level of literacy. However, normative literacy means more than this, for it includes a two pronged conceptual problem. First, the problem of where we draw the line between reading and spelling

success, or failure; such distinctions are vague and socially constructed. Second, the problem of defining difficulties with literacy as an impairment.

If one uses the concept of impairment to describe someone who has difficulty walking because of a limp, or speaking because of a stutter, this is how we would use the concept. However, we must ask, is this use applicable to reading and spelling? If someone is not proficient in anyway at football, or chess, we would not say they are impaired in playing football or chess, only that 'they are not very good' at football or chess. The question then becomes: is reading and spelling like walking and talking, or, is it more like football and chess, (and other complex social constructs) in the relevant regard? In other words, can we really talk about dyslexia as an impairment because to do so assumes that there is such a thing as a non-dyslexic norm of literacy, in a similar way that there is an expected norm or capacity for walking and talking. Alternatively, is reading and spelling something where one is 'good' or 'not good' at it, similar to football and chess. I would argue that literacy is not something in which that someone can ever be 'impaired' in (unless, for example, one could not see the page). One can be good or bad at reading but that is a rather different matter. Normative literacy is not only the assumption that arbitrarily drawn lines between reading and spelling are appropriate; it is also the assumption that one could or should draw a line at all.

If in seeking to draw a line between reading and spelling success or failure, one defines failure as an impairment, this is a form of normative literacy. The diagnostic criteria for dyslexia (such as difficulties with reading, spelling, memory, and average or above average intelligence) are in themselves normative. Furthermore, normative judgements are being made about what counts as intelligence, reading, spelling and memory. If we draw artificial and arbitrary

distinctions between who succeeds and fails in reading (for example), we are also making judgements about what reading is and what counts as reading. As Winch (1998: 68) points out brains do 'not operate in a normative environment', as Winch (ibid) argues it is a human being that operates within a normative sphere.

Normative literacy is therefore doubly normative. Those conceptual concerns have an added problem we need to consider with regard to psychology and neuroscience. Psychology may be able to ascribe normative criteria to behavior (such as a human being reading), but a neuroscientist cannot ascribe normative criteria to brains, for brains do not engage in behavior, people do. Normative literacy is therefore not only normative practices (and beliefs and assumptions about those practices), it is also normative misconceptions about what psychology and neuroscience can or cannot tell us.

Consider the use of the concept of talent (natural ability); for example, 'she was a talented tennis player', 'he was a talented musician'. If someone was not good at tennis or music ('he lacked talent in tennis', 'she lacked talent in music') we would *not* be saying there was something 'missing in their brain'. We can also distinguish here between impairment and a lack of talent. Someone might injure their arm and might be impaired in their ability to play tennis or play a musical instrument because they were impaired in holding a racket or a musical instrument. Their talent, or lack of it, is distinct here from the impairment. In the case of difficulties with reading or spelling we need to ask, is it like the arm injury or similar to a lack of talent (natural ability)? Due to the double normativity within normative literacy (both where the line is drawn and that we draw a line at all), I suggest that actually it might be clearer and simpler to talk of reading and spelling as a natural ability (a talent), or a skill acquired through practice (like riding a bike), rather than something that can, or could ever be, impaired. It is a conceptual

matter, not an empirical one, to say that one can be skilled or talented (or not) in reading or spelling but one cannot be impaired. If one thinks of reading and spelling as a talent, or skill acquired, then one need not make any association at all with intelligence. Having higher intelligence when playing tennis or playing a musical instrument is certainly helpful but one would not suggest that someone with higher intelligence is *automatically* better at tennis or music than someone with comparatively lower intelligence. We need no complex theory to explain why someone who has no talent for tennis or music has average or above average IQ. We need to ask why we need complex theories and explanations in terms of reading and spelling?

Someone might choose to point to the importance of literacy in our society. This is certainly a fair argument, but such importance is socially constructed: it is normative. Arguments that defend dyslexia as a special case rely on normative beliefs of literacy that exist in our society. In other words they are reliant on function, but a function which is decided by elites, replicated by those elites, and enforced through educational policy by those elites. We can therefore point to Lexism, as practices and assumptions of normative literacy, which actually define someone as dyslexic. Dyslexia can therefore be said to be a normative theory - not only that we can draw a line, but that we should draw a line, between reading and spelling failure and success.

## **Conclusion**

In this chapter, I argued that Lexism is a new concept which enables us to engage with new conceptions of who dyslexics are, and what dyslexia is. I argued that as philosophers of education are largely concerned with *conceptions* of education, in focusing on conceptions of literacy, being dyslexic and dyslexia, this

thesis is located within the philosophy of education. I have outlined the differences between words, concepts and conceptions, and given an example of the role of the philosopher in clarifying conceptual confusion. I explained 'pictures' and 'ways of seeing' (conceptions), and as an example I provided two different conceptions of homosexuality. I outlined three examples of similar conceptions of 'literacy' and 'literate': ancient Athens, Edward Gibbon and that outlined by Scribner and Cole. Those conceptions of literacy, I argued, are normative. I considered two rival conceptions of the historiography of dyslexia as a science, and argued that dyslexia is a normative theory, and I clarified how the concepts of normative and literacy can be seen as both a negative as well as a positive. Finally I set out my conception of normative literacy.



## **Chapter 2 Lexism, a rejection of dyslexia as a shibboleth**

### **Introduction**

In this chapter I focus on how we might understand the concept of Lexism. As Lexism is my own concept, I set out how I envision it, I am not seeking to demonstrate that it exists in this chapter, only what it would look like if it did. In the first section I outline how Lexism might be thought of as similar to other social phenomena, such as racism and sexism. I emphasise the different normative assumptions, beliefs and practices associated with Lexism and compare this to other similar social phenomena. In the second section I provide a number of hypothetical cases of how dyslexics may experience Lexism, and might even resist Lexism. I also provide hypothetical cases of those in the media or politics engaging in Lexism. In these hypothetical cases I seek to avoid dismissing Lexism as a simple prejudice, though at times this is precisely what it is. Instead I seek to draw out instances which show the variety and complexity of the phenomena; I endeavour to stress that Lexism is *not* some kind of conspiracy theory. Lexism is not engaged in by non-dyslexics to 'do down' dyslexics, so to speak. In the third section, provide an explanation of my understanding of Othering and how this impacts on dyslexic self-identity. In the fourth section, I consider whether we should consider dyslexia to be a shibboleth, a deeply held belief by which dyslexics can make sense of their dyslexic identity. I suggest that what dyslexics face is a social phenomenon similar to racism and sexism. The question then becomes; is Lexism a subdivision of Disablism or Ableism or is it a separate and distinct social phenomenon?

## **(2.1) Social Phenomena similar to Lexism**

In this section I compare Lexism to other social phenomena which are similar, but not the same: racism, sexism and homophobia. I distinguish features of Lexism we might associate with attitudes, expectations and beliefs. I also highlight features of Lexism which we might associate with discrimination: unnecessary barriers and inhibitions faced by dyslexics. If one's view is based on an understanding of Lexism, then societal and cultural factors are important. A detailed examination of such factors enables us to question the concept of dyslexia the 'impairment' as separate from disability. Those factors are the origin of the Othering and discrimination that disable dyslexics.

**Table 2.1 Lexism and similar social phenomena**

<b>Social phenomena</b>	<b>Normative criterion</b>
Racism	Ethnicity
Sexism	Gender
Homophobia	Sexuality
Lexism	Social constructions of Literacy

In all the examples of social phenomena, similar to Lexism, as set out in the above table, there is a normative criterion by which individuals are Othered and discriminated against. In the case of racism this is ethnicity: including nationality, skin colour, culture, accent and so on. In the cases of sexism and homophobia this is gender and sexuality respectively. Those normative criteria arise from beliefs, attitudes and expectations which individuals are judged against. Someone who is of African ancestry is viewed, by a racist, as inferior to someone of European ancestry. Likewise, a women is deemed by a sexist, to be inferior to a man;

someone who is homophobic views someone who is 'straight' to be superior or 'normal' compared to someone who is 'gay'. In those examples of social phenomena similar to Lexism, there is a belief in the superiority of one kind of person over another. Likewise, with Lexism, those who hold Lexist beliefs believe themselves superior to dyslexics. I would also argue that the belief in the existence of dyslexia reveals an assumption; the superiority of the non-dyslexic or 'normal' person over the dyslexic, who is seen as inferior, or abnormal. The very concept of dyslexia is therefore itself Lexist.

The normative criteria, in terms of Lexism, are performance in reading, spelling, handwriting and other literacy based tasks; according to arbitrary culturally decided age-related expectations. Those who fall below those arbitrary cultural expectations of literacy are believed by a Lexist to be either (a) 'stupid' and/or 'lazy' or (b) have some form of disorder or abnormality. Racism, sexism and homophobia have, based on their respective normative criteria, discriminatory practices associated with them. Likewise, in the case of Lexism, we can point to examples within the school system and wider society of discriminatory practices associated with expectations of literacy. The use of print-based or handwritten literacy to judge ability, limit progression or reduce access to the curriculum can be viewed as discriminatory educational practices we might associate with Lexism. The two key differences between Lexism and other social phenomena are obvious: Lexism is not currently recognised, the other social phenomena are. Historically dyslexics also lack a civil rights movement associated with them; though this may change. In discussing in general abstract terms Lexism as a social phenomenon, however, we lose the specific nature of cases in the world. When we recognise cases of racism and sexism in the world we do so through

recognising that concept in the actual case. Therefore to show how I envision the concept Lexism I provide a number of hypothetical cases.

## **(2.2) Hypothetical cases of Lexism**

In this section I use hypothetical cases to illustrate what I mean by the concepts of Lexism or Lexist. Rather like hypothetical legal cases given to law students, these hypothetical situations are important to set out my understanding of the concept, not as empirical evidence. I am not seeking to demonstrate Lexism existence in this section (I do this in later chapters), here I show how we *might* use Lexism (as a concept) within our language. First, one can discern Lexism in everyday scenarios if one considers hypothetical cases that dyslexics may experience in their everyday lives, or have experienced in living memory. Those hypothetical cases are: the grandfather, the employee, the schoolchild with an iPad, the businessman and the student, which I set out and discuss below. I also note the real example put forward by Riddick (1996). Second, I suggest that Lexism need not be contingent on prejudice to be perpetuated, a lack of awareness is sufficient. I seek to show we need not assume that Lexism is some form of conspiracy theory; I use the hypothetical cases of the journalist, the editor and the two politicians to do this, which I set out and discuss below.

### **The Grandfather**

Consider the hypothetical case of a grandfather, over seventy years of age, from a working class background who is dyslexic (for the sake of argument) but was never assessed for dyslexia. As a child his teachers viewed him as stupid and lazy. On leaving school he took up employment as a highly skilled craftsman. As a boy he was an able artist. His teacher asked him draw a horse, he was told specifically not to trace out the image of a horse from a book. He went into school the next day and proudly presented his picture to his teacher. The teacher's

reaction was to assume the boy had traced the image of the horse because he believed the boy to be stupid; unable to produce such a lifelike image. The boy was then caned. When the boy insisted that he had not cheated, he was caned again because the teacher perceived him to have lied.

This is an example of a hypothetical case of Lexism; and thankful in the past. Consider for a moment the features of the case. The teacher held particular beliefs about literacy, which equated it to intelligence. Furthermore the teacher equated it to overall ability including artistic ability. An assessment for 'dyslexia' was rare and 'dyslexia' was not an accepted term, and caning was socially acceptable. The concept of dyslexia as impairment is not present, but Lexism is. I suggest here that Lexism has features of folk psychology which is not dependant on dyslexia as a concept. It was not the 'dyslexia' label that Othered and discriminated against the grandfather it was the attitude of his teacher. The beliefs led to the practice (caning), literacy was not involved directly, but the teacher was well aware of the dyslexic's difficulties with reading and writing.

### **The Employee**

Let us consider the case of a dyslexic woman who is an employee of a large company, whose employer is seeking to make reasonable adjustment. The dyslexic has had a very poor school experience and was labelled by teachers as having a 'SpLd'. She associates the term with being patronised, discriminated against and being Othered. The Human Resource (HR) department in this hypothetical case is untrained and unaware, or poorly advised. HR send the dyslexic to its Occupational Health practitioner, the dyslexic complains pointing out that she is not ill. The Occupational Health practitioner agrees and points out that 'Specific learning difficulties' (SpLd) is a matter for an educational psychologist. On meeting with HR the dyslexic woman is repeatedly referred to by HR

representatives as someone 'with a SpLd' or 'having a SpLd'. She again objects, she states clearly that she finds the term 'offensive and derogatory'; she does so because of her own school experiences, and prefers the term dyslexic or person with dyslexia. HR ignore her request and continue to refer to her as a person with an 'SpLd', when challenged they defend their position by saying it is the term used by the 'experts'.

In this hypothetical case we can see that in some case of Lexism, it may not be the 'experts' or professionals engaged in labelling and Othering which is an issue. It may well be how such labels are used and applied by those who are in management positions or other similar positions of power (such as HR departments). The dyslexic woman is not objecting to a label; she is objecting to a particular label of which she had very negative experiences as a child. In ignoring her wishes and imposing the label they wish to adopt, for whatever reason, the HR department have engaged in Lexism. They have disempowered, humiliated and Othered someone on the basis of what they perceive 'an expert' to be telling them, despite the fact the Occupational Health practitioner is a nurse not a psychologist. This is an example of Lexism and we should note reading and writing practices are not involved, labelling, self-identity and the role of 'experts' are of primary significance.

### **The Child with an iPad**

The parents (one dyslexic, the other non-dyslexic) of a primary school aged dyslexic child realise she is having difficulties learning to read. She is bright, inquisitive, and talkative and loves stories when read to. The teachers and parents are both concerned when she falls behind the expected 'reading bands'; reading well below the national average. The situation becomes worse when the child is given the official reading texts designated to be at her reading level to read at

home. The child point blank refuses to read those texts because they are ‘too babyish, too boring’. The parents take matters into their own hands; they buy their daughter an iPad, they load e-books on it which are more appropriate to her age. Those e-books contain interesting pictures alongside the text; actors reading the text out loud, and as each word is read by the actor the word is highlighted in a bright colour on the screen. The daughter’s reading improves rapidly, she engages with reading on her own without assistance, and she begins to catch-up in terms of reading bands. However, the parents no longer trust the teachers’ professional opinions, take the official texts home but do not ask the girl to read them. The non-dyslexic parent continues to attend parents’ evenings to be polite, but the other (the dyslexic parent, with their own poor experiences of school) completely disengages from the teaching professionals.

There are several points to notice here. The Lexism in this case did not have prejudices associated with it, the teachers were not prejudiced. However, they were legally obliged to ensure that the little girl read the Department for Education approved banded reading texts. The teachers might recognise that the iPad with its e-books is a better way to enable this particular pupil to learn to read. The teachers, however, had no choice but to insist on the practice of reading banded books, but in doing so the parents became disengaged from the school. It was government educational policy which was the problem in the hypothetical case; the enforcement of the beliefs of central policy makers caused a rift between the parents and teachers. Lexism in this case, involved no prejudice of those directly involved, and did not stop a child from learning to read but damaged the relationship between parents and the teaching profession, which may last for the rest of the child’s school career. We might also ask whether parents generally

might be more likely to listen to teachers and not buy an iPad for their child and instead rely on official and approved texts.

### **The Businessman and the Student**

A dyslexic business investor has for years struggled with the print based literacy requirements of his profession. This dyslexic, for the sake of argument, is from the most 'severely' dyslexic 4 per cent of the population. Reading business proposals and writing responses to those proposals is very time consuming and difficult. After considerable thought the dyslexic business investor informs potential businesses that all future proposals must be in the form of a sound-file on an email attachment. He continues to be a successful business investor, it makes his life easier and those companies seeking his financial backing have no choice but to comply. In short, this dyslexic is in a position to challenge the normative criteria associated with literacy.

In this hypothetical case a dyslexic is in a position to resist Lexism, and do so effectively. In doing so there is no practical disadvantage for the dyslexic in opting for an alternative to literacy. In this case literacy, even e-based literacy, was unnecessary as a record of information. However, now consider a continuation of this hypothetical case. The business investor has no formal education and decides to do a business degree. He asks his tutors if he can send his essays and other assignments as sound-files rather than written texts. Think for a moment how likely his tutors would be to comply; how concerned a University might be for its public image. In this scenario let us assume that the student's tutors refuse his request. They argue that 'dyslexia support' exists on campus and in the 'world of work' he will be expected to produce written documents such as reports and business proposals. The 'world of work' becomes an excuse for retaining normative literacy



in a form which is socially and cultural favoured. The businessman/student in disgust hires a typist to transcribe his assignments, and thus again successful resists Lexism.

This is an example of Lexism, however, we should note that it was the dyslexic's existing wealth that enabled him to resist those normative practices. Again, there was no prejudice involved in this case per se. In both cases where he successful resisted Lexism we can also note what might have occurred if it was the dyslexic who was seeking investors (rather than being the investor), or what might have occurred if he had not been able to hire a typist. In such cases as a 'severely' dyslexic man he would have not been able to start his business particularly easily, he might have passed his course but with great difficulty, and perhaps at a lower classification then he eventually received.

### **Riddick's example**

Riddick (1996) provides an example of one dyslexic with good academic ability but limited ability to communicate that knowledge in writing. The evidence is from one mother's view of her dyslexic son. Though this example is not hypothetical let us assume for arguments sake that the mother's description is completely accurate, to provide us with another example of Lexism. Her description of her son's dyslexic traits is worth quoting at length:

He's a good all rounder really. In a funny sort of way I actually think he's quite good at English! He chooses ... the best word to express something and his comprehension has always been excellent. He got almost a 100 percent for comprehension in the SATs (11 year old) but of course his writing and spelling let him down. But I've noticed he gets marked down for things like history and geography because his writing's so poor, anything really where he has to write he's disadvantaged. So the thing is what he gets the best marks for is maths. He's not really that interested in maths and he says he doesn't like maths. But I can see him ending up doing maths simply because he won't manage anything else. I know in a way it's lucky that at least he can do maths, but I think it's a shame if he ends up without a real choice and without doing something he's really interested in.

(Riddick, 1996: 174).

It is important to note that this unnamed schoolboy has high overall academic ability but is marked down by his teachers. This appears to be based purely on his handwriting and his ability to spell. The dyslexic student's difficulty with literacy pushes him in a direction that he may not have taken otherwise, in this case mathematics. When his mother states 'he won't manage anything else', this is because he is being marked down, not for content or understanding of the subject, but for penmanship and spelling. The limiting of choice in terms of academic subjects or career is an important factor. What is important to note is that his access to learning and progression through it is via written work and it is this, regardless of his actual ability, that decides his performance in that subject.

### **The Journalist, the Editor and the Politicians**

Now consider two linked hypothetical cases: one focused on the media and the other on politics. I argue that although discriminatory practices and attitudes are common, we should endeavour to avoid viewing them as some form of conspiracy. I suggest that the elite's actions that discriminate or Other dyslexics arise from a narrowness of view, rather than intentional oppression. Within this hypothetical case I focus on two scenarios faced by different members of the 'elite' who unconsciously uphold normative literacy. Let us assume that none of the principal protagonists (the journalist, the editor and two politicians) are prejudiced. For the sake of this hypothetical case let us assume that each of them has a close friend or relation who is dyslexic and all are 'pro-dyslexic' in sentiment. Each, however, is faced with a situation which forces them to uphold normative literacy through simple non-malign self-interest. These hypothetical cases are based on a

principal of charity, even if in the real world, such members of the elite may in some individual cases be prejudiced against dyslexics.

A journalist is told by their editor to produce a piece for a right-wing daily newspaper criticising a left-wing government for 'falling' educational standards, especially in literacy. They do so without seeing any link to dyslexia or considering that they are partially responsible for maintaining that which 'Others' and discriminates against their dyslexic friend or relation. Why after all would they? The journalist would consider these two things to be separate. However, even if one were to suppose that they could see a link they would be in a difficult position, they need to retain their employment; saying no to their editor would be unwise. The editor likewise might not have any animus against dyslexics; he simply wishes to sell newspapers, keep his owner happy, and promote his owner's political agenda. The editor and the journalist also agree to produce a human interest piece on dyslexics in employment and the practical difficulties they face. The newspaper article is heavily influenced by the medical model of dyslexia because that is the most recent research that the journalist is able to find on the internet. Again they would see no contradiction here, as they do not realise that they are engaging in defending or perpetuating normative literacy.

The journalist and his editor's motivation have nothing to do with a prejudice towards dyslexics. Normative literacy is upheld and promulgated but there is no conspiracy. Both the journalist and the editor are working within highly limited and delineated spheres, wishing to appeal to what its readership believes and *thinks it knows*. Both the journalist and the editor act out the promulgation of normative literacy; they are not seeking to engage in the Othering of dyslexics. Dyslexics

may be further Othered by their actions, but this is a different aspect of normative literacy.

Let us now consider the situation of two politicians, one a minister for education and the other, the opposition shadow minister for education. Again let us assume that neither has any particular prejudice against dyslexics. As a result of media pressure attacking 'falling standards of literacy', the minister resolves to 'raise standards of literacy' and introduces policy measures to attempt to do so. The shadow minister for education attacks the minister for failing to deliver on government pledges to 'raise literacy standards'. Neither have room to manoeuvre, and both are seeking either to retain or gain political power. Both politicians are attempting to meet what they perceive as popular demands for 'raising' standards of literacy; in doing so the politicians reinforce and promulgate the social norms and expectations of literacy. This results in further discrimination against dyslexics within the education system. Yet this is not their intention, merely a result; their motivations are political self-interest, not malign prejudice. In maintaining those social norms and conceptions of education, those requiring SEN provision continue to increase. Both politicians face pressure from constituents, who have a child with an SEN, to do more. However, the budget to meet the requirements of children with an SEN is wholly inadequate. Again, no intention to discriminate can be inferred from this, though it may be the consequence. Both politicians promote normative literacy through public debate and by policy initiatives, without the intention of further discrimination against dyslexics.

These two hypothetical cases *could* have been written in such a way as to suggest the actions of the journalist, editor and two politicians arose from prejudice. This is not to say that those in the media and politics do not promote

animosity towards dyslexics, on occasion they might. This, however, is not the primary motivation; it is more reasonable to argue that maintaining the norms of literacy is the motivation behind public policy. If someone in the public arena does not hold these views, there is arguably great pressure on them to conform, through those around them seeking to conform and *be seen to conform*. In both hypothetical cases there was pressure from 'below' so to speak, from the public at large, to conform to this view as well as from 'above'. It is reasonable to suggest that the elite might fear being seen by others to be impinging upon norms of literacy.

### **(2.3) Othering and dyslexic self-identity**

In this section I will outline the use of the term Othering, as explained and used by sociologists and how this relates to prejudice, and what sociologists term 'reification'. This will provide an expanded context for the examples in the previous section. I will also consider the role of elite groups, especially psychologists. I will then consider how we might understand dyslexic self-identity within this context. The sociological use and meaning of the term Othering has been summed up by Krumer-Nevo and Sidi (2012: 300); as 'the process of attaching moral codes of inferiority to difference'. Nevo and Sidi (2012) were concerned with the Othering of woman in poverty, some of whom had become sex workers to survive. Likewise, Jefferson (2015), in his study on racism, argued that hatred, prejudice and 'othering' are not one in the same thing. Jefferson (2015) viewed Othering as defining some as 'insiders' and some being 'outsiders', and should be seen as distinct from prejudice. Mik-Meyer (2016) has highlighted how, in Danish workplaces, those with cerebral palsy are assigned an Othered identity, but did not necessarily face hostility or prejudice. As Taylor (2007) noted, sickness and disability are frequently stigmatised, and those who are sick and disabled are seen

as inferior, and lack full social acceptance which can result in the sick or disabled having feelings of shame. Othering therefore is a broad and flexible concept.

I interpret the use of Othering, drawing on those authors, when I refer to dyslexics, as follows. I would amend Nevo's and Sidi's (2012) summary to the associating of 'inferiority to difference'. Following Jefferson (2015) and Mik-Meyer (2016), I do not associate Othering automatically with hatred and prejudice, though it can coincide. Acknowledging Taylor (2007), I would suggest that like the sick or disabled, dyslexics can be seen as inferior, lack full social acceptance and this can result in them having feelings of shame (see also, Burden, 2005). However, 'Otherness is accomplished by means of rules of behaviour and the mechanisms of discourse, and performance set by hegemonous groups' (Krumer-Nevo and Sidi, 2012: 300). This means that Othering can occur when an Othered group fails to meet normative criteria (social rules and expectations); those criteria are created, defined and policed by elite groups (or 'hegemonous groups' as Krumer-Nevo and Sidi call them). Those elites, I would suggest, include psychologists, policy makers and educationalists. As Moghaddam and Studer (1997: 187) argue, main stream psychology is white, middle class, male, and actively 'legitimizes power relations.'

Within the 'rules of behaviour' which Krumer-Nevo and Sidi refer to, I would also include expectations and beliefs of literacy, age specified norms of literacy, acceptable practices of literacy and so on. Dyslexics, due to the very nature of their difficulties with literacy, break those perceived social rules associated with literacy. Moghaddam and Studer (1997: 187) argue that an:

emphasis on normative systems necessarily leads to a concern for power disparities. Some groups enjoy power more than others in shaping normative systems. Through such power, dominant groups can influence the behaviour of minorities.

In the case of dyslexics, psychologists, educationalists and policy makers seek to change the behaviour, and capabilities, of a minority (for good or ill) who do not meet expectations of literacy.

Othering is also related to 'reification' in the sociological sense. As used by sociologists, reification means the treating of 'human phenomena as if they were things' in a 'non-human or possibly supra-human' manner (Berger and Luckman, 1966: 106). Reification is a process in which things such as 'artistic production' or 'laws of economics' are abstracted from human beings, and seen as 'real and separate from the people who produced them (Waters, 1994: 186). Literacy acquisition, educational achievement, and schooling could be added to this list of abstractions. Dyslexics, as an Othered group, fail to meet normative criteria within the abstractions of literacy acquisition, educational achievement and schooling (reifications). Those normative criteria are created, defined and policed by policy makers, psychologists and educationalists that enact and further the dominant discourses surrounding those abstract conceptions.

Furthermore, identity may be reified, both one's own and that of others. There is then a 'total identification of the individual' with their 'socially assigned typifications' (Berger and Luckman, 1966: 108). Berger and Luckman (1966: 108-109) use the example of 'the Jew', 'Jewishness' and 'Jewish blood'. This form of Othering would normally be referred to as Anti-Semitism (or racism), but it can also be seen as an example of the sociological use of reification. Prejudice, Othering and reification can occur simultaneously therefore. In the case of Lexism, Othering may lead to prejudice or hostility, or vice a versa. For example, if we talk of 'the dyslexic', or reify dyslexia as if we were talking of the essence of being dyslexic, like 'Jewishness' was used in Berger and Luckman's (1966) example. Berger and Luckman's (1966: *ibid*) phrase 'total identification of the individual with

his socially assigned typifications', can be amended for my purpose. If we say the 'total identification' of the individual with dyslexic like-traits with their 'socially assigned typifications', this can be thought of as a form of Lexism. In short, the stereotyping of what a dyslexic can or cannot do, thinks, feels, believes and so on.

In talking of dyslexic identity, or, an individual dyslexic's self-reference, one should be cautious of the 'total identification' of the individual with their 'socially assigned typifications'. Burden (2005) has acknowledged the impact of schooling on the self-identity of dyslexic school boys as poor academic performers. This seems to be a fair argument, and I would suggest that dyslexics have feelings of shame, a sense of inferiority and difference. Dyslexics can be treated and viewed by some as inferior and as such lack acceptance at a social level, especially within educational settings. However, dyslexic identity is also expressed by dyslexics on internet sites, most notably in claiming a dyslexic identity for famous or historical figures. The identification of 'famous dyslexics' in the historical record has been a cause of long running academic arguments (see for example Thompson 1971, Adelman and Adelman 1987, Aaron et al 1988, West 1996, Thomas 2000, and Kihly et al 2000). Rather than view those claims as purely bogus, it would be better to interpret these in a different manner.

I would suggest that 'famous dyslexics' on the internet, both real and claimed, are a form of identity creation. That is, the formation of a dyslexic identity separate from that assigned by psychologists, educationalists and policy makers. Furthermore, such identity creation is actively resisting such elite groups by rejecting the concept of the dyslexic as inferior, but conforming to normative views of literacy (Lexism) by accepting the dyslexic as somehow biologically different. Perhaps the most notable example of this formation of a dyslexic identity separate from that assigned by elite groups is the popular work of Tom West (see for



example, West 1996). West makes extensive use of 'famous dyslexics', both real and claimed, to forward his view of dyslexic identity. West, a dyslexic himself, argues for the visual spatial abilities of dyslexics, and a view of dyslexic identity as different but equal, and in some cases, superior to non-dyslexics. I do not find West convincing, but his work is the expression of, and enacts the creation of, the formation of a dyslexic identity separate from that assigned by elite groups. However, what is notable about West's (1996) work (and similar materials found on the internet) is that the identification of some historical or famous person as dyslexic is often based on that person being Othered or mistreated within a school setting. Dyslexic identity stands as a marker, so to speak, for those who have experienced such Othering, some examples of which were provided in the previous section.

#### **(2.4) Dyslexia as Shibboleth**

In this section I suggest that dyslexia has become a shibboleth, a deeply held belief by which dyslexics can make sense of their dyslexic identity. A shibboleth in this instance is not only a valued conception, it is also a means to distinguish and assert group identity from threats outside that group identity. Consider, again the hypothetical cases; if those dyslexics were asked whether dyslexia exists or not what would their probable answer be? It is reasonable to suggest that to make sense of their dyslexic identity and their experiences of Lexism they would assert strongly that it does. Remember, the dyslexics in these hypothetical cases are not academics or students in this area; they do not have access to the subtleties of the dyslexia debate that would recognise their existence as human beings with genuine gifts and abilities with equal disadvantages in the areas of literacy and memory. For them it is a simple matter, either they are dyslexic, with a neurological difference or deficit called dyslexia, or they are what

those who have Othered and discriminated them believe. As such dyslexia would function as a shibboleth; its value is that it is not only a means to challenge prejudice but also a marker of dyslexic self-identity.

The value of Riddick's (2001) social model is that someone familiar with the model would recognise in those hypotheticals discrimination and Othering, however, Riddick recognises the existence of an 'impairment' called dyslexia. Someone might choose to argue that Lexism might be thought of as a subdivision of disablism or ableism. As Bolt (2014: 3) notes those two concepts are similar though 'ableism renders people who are not disabled as supreme; disablism refers to attitudes and actions against people who are disabled.' Bolt (2014: 172), giving an editorial response to my book chapter (Collinson, 2014), places the concept of Lexism amongst 'specific types of ableism'. I will argue, however, in later chapters that Lexism is a separate and distinct social phenomenon (though the distinction is a subtle one) because those who hold Lexist beliefs socially construct the 'impairment'. This can include dyslexics themselves seeking to make sense of their dyslexic identity.

Riddick's (2001) social model has some aspects which are similar to Lexism (such as Othering, discrimination and the importance of culture), but Riddick accepts the concept of dyslexia, which I reject. Riddick (2001: 234) concludes her article by arguing that a 'social model of disability perspective which challenges people's negative assumptions and mis-attributions towards [dyslexics]....may have an important role to play in achieving both high literacy standards and high tolerance.' The principal similarities and differences between Riddick's model and Lexism become apparent in this quotation. I concur; a social approach towards dyslexics is indeed important to challenge and ultimately change 'people's negative assumptions and mis-attributions'. However, Riddick

appears still to be committed to the idea of 'high literacy standards'; I make no such commitment. Riddick (2001: 224) argues that we should question 'some' believed norms of literacy; in contrast, I suggest we should be open minded about *all* assumed norms of literacy. I argue that we need to be careful in terms of accepting political rhetoric around concepts such as 'higher levels of literacy'. Riddick (2001: 234) quotes a dyslexic teacher that these issues are 'very political' and 'very elitist' and that it is 'all about power'. The dyslexic teacher's point is a strong one; the role of political elites is significant and I examine this in Part 2 of the thesis.

Riddick (2001: 234) believes that her aim of 'both high literacy standards and high tolerance' is mutually compatible. I argue, however, that the promotion of conceptions of education which seek ever higher literacy standards may lead to demands for impractical or unfeasible levels of literacy, which itself may be an aspect of Lexism. In later chapters I critique how different forms and expectations of literacy lead us to construct the concept of dyslexia. We do so because we recognise the existence of dyslexics, yet we (as a society) still assume the value of literacy as a measure of academic ability, understanding and intelligence. I would suggest therefore that dyslexia has become for many dyslexics a shibboleth. However, some authors have suggested that dyslexia can be thought of as a 'meme' (see for example, Elliot and Grigorenko 2014, and Bishop 2014). A meme is 'a unit of cultural transmission....The meme's ability to survive by means of replication does not depend on whether it is true, useful, or even potentially harmful', only that it is communicated easily to others (Elliot and Grigorenko 2014: 182). In this conception of dyslexia, dyslexia is a simple and attractive theory. Perhaps, but if one considers the resistance to the concept of dyslexia by those

seeking to reject the existence of dyslexics, this appears a rather over simplistic argument.

Literacy is a normative and dominant feature of our culture; it is closely associated in a simplistic manner with understanding and academic ability. To reject literacy's dominant place in our society is, I suggest, social problematic for many; it is far easier to recognise a neurological difficulty 'in the brain'. Stein (2014), for example rejects Elliot and Grogorenko's arguments, and reasserts an 'in the brain' explanation. Even though he recognises the problems within the dyslexia debate, Stein insists that dyslexia is still a useful concept. Bishop (2014) also notes that other previous rejections of dyslexia have been ignored. I would suggest that this is because 'dyslexia' is a means to explain the existence of dyslexics, and as such for dyslexics, and those who seek to assist them, it has become a shibboleth. A shibboleth in the sense that it is a marker of group identity, and a rallying point against a form of Lexism based on folk psychology, which would dismiss 'dyslexic' as a politically correct term for the less able. A key point for this thesis, is therefore, to show that we should recognise dyslexics as a social group, defined as other social groups are, such as by ethnicity or religion. As such I reject dyslexia as impairment, and I propose that Lexism is not a form of ableism or disablism, but something else, closer to racism and sexism.

## **Conclusion**

In this chapter I focused the concept of Lexism, as I envision it. I outlined Lexism's similarities with other social phenomena. I provided hypothetical cases of dyslexics experiencing Lexism, again as I envision it. I stressed that Lexism is *not* some kind of conspiracy theory; using hypothetical cases of those in the media or politics to set how I would suggest Lexism functions. I provided a context for those examples by examining how sociologists understand the concept of Othering. I

argued that we should view dyslexia to be a shibboleth. This can on occasion be a deeply held belief by which dyslexics can make sense of their dyslexic identity. I rejected Lexism a subdivision of disablism or ableism, and argue it is a separate and distinct social phenomenon.

## **Chapter 3 Definitions and the Philosophy of Education**

### **Introduction**

The focus and purpose of this chapter is to set out my methodical approach, which is a philosophical one. In the first section, I set out the value and relevance of the philosophy of education. I emphasise the importance of doing philosophy (philosophising), as opposed to knowing facts about Philosophy. In the second section I set out the methodological problems posed by definitions of dyslexia. I identify three problems within the dyslexia debate which are of significance for methodological reasons. I argue that those problems can be dissolved by adopting a particular philosophical approach to dyslexia. In the third section, I indicate philosophers who influence my approach and why I adopt such an approach. In the fourth section, I explain two of my main methods; the employment of objects of comparison and thought experiments.

### **(3.1) Philosophy of education**

In this section I outline what the Philosophy of Education is and why it is relevant to Riddick's social model and to Lexism. As Winch and Gingell (2004) point out philosophers of education are concerned with particular conceptions of education. Likewise, I am concerned with conceptions of dyslexia and literacy which intersect with, and interrelate to, conceptions of education. As Standish (2010) argues some research questions cannot be answered with empirical information (whether that information is quantitative or qualitative) and such questions are conceptual, that is philosophical. Key to answering conceptual questions Bailey (2010) argues is the capacity to philosophise; to reason one's way through a conceptual problem. Bailey (2010: 1) notes that: philosophy

'requires thinkers to think for themselves.... it is not possible to learn philosophy; it is only possible to learn how to philosophise'.

I use an example of philosophising provided by Best (1978: 8-9) concerning the philosopher William James. Best emphasises this example as one concerned with philosophising on meaning. On returning from a walk, whilst on a camping holiday, Best (1978: 8-9) recorded, that James:

found other campers engaged in a dispute concerning a man, a squirrel and a tree. On one side of the trunk of the tree clung a squirrel, but since the man was on the opposite side he was unable to see it. The others urged him to look at it so he walked round, but the squirrel also moved round the trunk in such a way that although the man circled the tree several times he was unable to catch sight of the elusive animal. The ensuing argument arose in response to the following question: The man went round the tree, and the squirrel was on the tree, but did the man go round the squirrel? William James was invited to adjudicate. He pointed out the answer to the question depended upon precisely what was meant by asserting the man went round the squirrel, or more specifically, what was meant by 'going round' in this context. If 'going round' meant that the man passed successively from positions first south of the animal, then west, then north, then east, then south again, then clearly he did go round the squirrel, since the squirrel was on the tree and the man successively passed through each of these position relative to the tree. If on the other hand, 'going round' meant that the man passed successively through positions first facing the front of the squirrel, then one side of it, then its back, then the other side of it, and then its front again, then clearly the man did not go round the squirrel, since he never occupied these positions relative to it. Once the distinction between the two senses of 'going round' becomes clear the dispute is dissolved rather than resolved, since it transpires that neither apparently opposing faction in the dispute was disagreeing with what the other meant by the term. Thus in fact there was no genuine disagreement between them.

Best (1978) emphasises there are two important questions which are the concern of philosophy with regard to any statement, first what does it mean and second, how can it be substantiated. Confusion can arise in how we use language, which can be clarified by seeking the meaning of a statement. As in the case of James, the aim is to dissolve rather than resolve the confusion.

This example also highlights several other points. As Best (1978: 9, emphasis in original) notes it is important to avoid seeing 'philosophising as *merely* a matter of playing with words and word meanings.' The conceptual confusion was caused by a particular use of words, and for that reason James had to clarify the meaning of those words in that case. In doing so James had to highlight to his fellow campers where their confusion had arisen to enable them to see for themselves why they were confused, and how this had led to the argument. In philosophising on conceptions of education, literacy, dyslexia, the meaning being employed is significant. What is meant by reading, writing, spelling, thinking, understanding and remembering and how these might be employed in given cases may lead to disagreement. I am not suggesting that the meaning of these concepts, and the conceptions associated with them, can be clarified easily. However, if we talk of normal or abnormal literacy acquisition we need to be *very* clear what is meant, otherwise (like the campers) we can rapidly become confused.

This approach fits well with the kinds of questions that Standish (2010) identifies as relevant to the philosophy of education. In his account he identified seven broad categories of philosophical questions applicable to education. First, questions of conceptual clarity; second those of social justice; third the critical discussion of current documents (such as policy) and practices. Standish's (2010) fourth category is questions of ethics and values; which include why we might value one activity more than another. His fifth category is questions concerning the nature of knowledge, and the sixth category is the significance of particular thinkers and their ideas to education. Standish's seventh category is where a question combines a number of elements from the other six categories; within this seventh category he also included the relevance of psychology to education. I am



concerned with two types of questions that Standish (2010: 12-14) identified. First, I am concerned with a question of conceptual clarity (how we might understand the concepts of dyslexia and being a dyslexic). Second, I focus on a question of social justice (the Othering and discrimination of dyslexics).

I am principally concerned, however, with the question of conceptual clarity; how we might understand the concepts of dyslexia and being dyslexic. The key difference between Riddick's social model of dyslexia, and my own idea of Lexism, is that Riddick accepts, and I reject, the concept of dyslexia as a means to define or understand dyslexics. Both Riddick and I argue that dyslexics face Othering and discrimination, which is a question of social justice. However, I argue that the idea of dyslexia is itself a form of Othering that should be questioned. I am engaging in the philosophy of education, to obtain clarity and understanding of the concepts of dyslexia and being a dyslexic.

### **(3.2) Problems with defining dyslexia**

In this section I explore three problems with defining dyslexia. The first I call the general problem of dyslexia, the longstanding difficulty in the literature of agreeing a definition of dyslexia (see, for example, Rice with Brooks, 2004). The second problem I refer to as the specific problem of defining dyslexia, building on the work of Stanovich (2005). The specific problem is the assumption of some form of mysterious discrepancy between capacity with literacy and intelligence. The third problem is with definitions generally; a definition does not aid our understanding though unfortunately it is generally assumed that it does (see for example, McFee, 2004: 22-24).

The dyslexia field has long argued over the most appropriate definition of dyslexia and any attempt to understand dyslexia (it is so often assumed) begins with a definition of it. There are a number of possible means to establish a definition. Ostensive definition is pointing at a chair (for example) and saying 'that is a chair'. Bennett and Hacker (2003: 97) note, that in the case of ostensive definition 'the utterance gives a definition' it is 'a definition by pointing'. Definition *per genus et differentiam* is where something is identified by a class it belongs to, and then its specific features are used to distinguish it from others in that class. An example would be the taxonomy of species; mice, for example, can be distinguished as being rodents, mammals and vertebrates by both their similarities and differences with other rodents, mammals and vertebrates. However, dyslexia is usually defined in terms of necessary and conjointly sufficient conditions.

Necessary and conjointly sufficient conditions define a word's use by establishing all the conditions for its use. For example, a 'bachelor' is an unmarried man, who is neither a widower nor a divorcee. The two inclusionary conditions to define someone as a 'bachelor' are that, first, they are unmarried, and, second, that they are a man. The two exclusionary criteria are that he is neither a widower nor a divorcee. Together, these conditions are 'necessary and conjointly sufficient' to define the word's meaning. Ziegler et al (2003: 170) provide a good example of how psychologists define dyslexia by necessary and conjointly sufficient conditions:

Children affected with developmental dyslexia have difficulty learning to read and spell despite adequate intelligence and educational opportunity, and in the absence of any profound sensory or neurological impairment.

The inclusionary criteria of this definition are difficulty with reading and spelling whilst also having 'adequate intelligence' and access to education. The

exclusionary criteria therefore would be a lack of intelligence or education or having a 'profound sensory or neurological impairment'.

However, the necessary and conjointly sufficient conditions for dyslexia are not universally agreed upon (see, for example, Frith 1999, Rice with Brooks 2004, Elliot and Grigorenko, 2014). The general problem, well recognised in the field of dyslexia, is that there is a lack of consensus as to how one defines dyslexia - its exact necessary and conjointly sufficient conditions. The general problem is made more complex by arguments over whether there are dyslexic 'subtypes' or a spectrum of difficulties (see for example Rice with Brooks, 2004). Frith (1999) and Rice with Brooks (2004) describe the field as being 'in chaos'. Cultural and linguistic context adds further to the problem of definition. Ziegler et al (2003) argue that how we might define dyslexia across language groups is different because languages are different. Wydell and Butterworth (1999) suggest that phonological dyslexia is different in different languages due to the nature of written language and its relationship to the spoken language; what they call the 'granularity' or 'transparency' of the language. Jimenez et al (2009: 181), agreeing with Wydell and Butterworth, focus on the example of Spanish, and note that 'developmental dyslexia is less common in Spanish than English'. This is because written Spanish is more logical and is easier to learn (Jimenez et al, 2009).

The second problem with defining dyslexia is a specific problem which has been identified by Stanovich (2005: 104); that which he calls the 'discrepancy assumption'. That is, the belief that there is a discrepancy between difficulties with literacy and intelligence which can only be explained by dyslexia, or an equivalent term. He argues that dyslexia research is in danger of becoming a 'pseudo-science' because of this unfounded 'discrepancy assumption.' Stanovich (2005)

identified three features of dyslexia, (or 'LD'): (i) difficulties with word recognition; (ii) this is related to difficulties with phonological coding; (iii) both those features can be alleviated with appropriate teaching. Stanovich (2005: 104, emphasis in original) notes, however, that the 'problem for the discrepancy assumption that is so foundational for the LD field is that: *none of these facts correlate at all with IQ!*' Stanovich is right to refer to this discrepancy assumption as 'foundational' as it was this assumption that led the early researchers to investigate 'word-blindness' or dyslexia in the late nineteenth and early twentieth centuries (see for example Miles and Miles 1999, Campbell, 2013). Though some researchers, such as Smyth and Everett (2004) and Elliot and Grigorenko (2014), reject the discrepancy model of dyslexia, it is retained by the World Health Organisation (1994) and the American Psychological Association (1994, 2013) for their equivalent terms for dyslexia.

The third problem with defining dyslexia is actually with definitions themselves, not just those pertaining to dyslexia. McFee (2004: 22) points out that 'putative definitions must be tested out against experience.' That is to know whether putative definition is correct, we must first know what the word means for us to know whether the definition offered to us is of any use. The candidate definition is already based on something already known and understood and as such 'definitions do not really aid our understanding' (McFee, 2004: 22). Let us take dictionary definitions as an example of the wider problems with definitions. Words in a dictionary rely on their use and meaning in a language, the dictionary is merely a way to record that use and meaning. We might consult the dictionary if we are unsure of a word's meaning, however, the dictionary definition did not establish that meaning only record it. As the use and meaning of words change slowly over time within a living language, the dictionary has only a limited function

in terms of our understanding and provides authority rather than clarity. Consider for the moment if the dictionary definition was inappropriate we would be able to recognise this if we already understood the concepts being employed in that case.

Consider for a moment how would we recognise an accurate definition if we did not already understand that which it referred to? Put another way, if we do not understand dyslexia how would we be able to accept or reject a potential definition of dyslexia as accurate? McFee (2004: 23, emphasis in original) makes a key point which is worth quoting in full:

Since the meaning of expressions in the definition must be known, the definition is not a neutral starting point; if I have no undefined starting place, the search for a *complete* definition will go on for ever. But if there is an undefined starting place, definition cannot be as fundamental to understanding as we assumed.

A definition I would suggest therefore is only formalising an already agreed or acknowledged meaning, or is an attempt to assert a particular meaning. There are two other important problems with definitions that McFee identifies. First, putative definitions can be too specific and exclude what should be included, or be too broad and include what should be excluded. Debates about what is (or is not) included within a definition of dyslexia would be an example of this problem.

Second, a candidate definition might fail because it is circular: 'they explain A in terms of B, B in terms of C, and C in terms of A' (McFee, 2004: 23). My approach is not therefore a rejection of our *capacity* to define something; it is a rejection of the idea that definitions are always useful, and can assist our understanding or knowledge.

### (3.3) Philosophical approach

I adopt an approach to philosophy in which I seek to draw attention to ways in which definitions can be misleading and result in confusion (see for example, Wittgenstein, 2001, Baker and Hacker, 1980: 315-450). I argue that this approach to dyslexia enables us to see the concepts of dyslexics and dyslexia in a clearer manner than the definitional approach. It frees us from *the need for a definition* for dyslexia. Best (1978: 4, italics in original) summing up his approach to philosophy suggests that it ‘provides understanding by considering the *nature* of information which we already have, what it *amounts* to, or what it *means*’. This is also my conception of philosophy. The philosophers Ludwig Wittgenstein and Gilbert Ryle influence my methodological approach. Wittgenstein’s (2001) later work is an important influence on Best (1974, 1978), McFee (1999), Standish (2010, 2012) and Culbertson (2015) who in turn influence my approach. Baker (2004) provides a detailed scholarly conception of Wittgenstein’s later work which informs my understanding of Wittgenstein. The philosophical approach of Ryle (1949) also provides a secondary influence, especially on Best, who combines the approach of Wittgenstein and Ryle in a similar manner to my own.

Those philosophers seek to obtain greater clarity through the careful examination of language and of its use, paying great attention to particular meanings in particular contexts. Important in the approach of those philosophers influenced by Wittgenstein is the appreciation of avoiding trying to ‘solve’ a conceptual problem, but rather *dissolve* the problem (Wittgenstein 2001, and Baker, 2004); rather like the example given by Best (1978) of William James dissolving the disagreement, instead of resolving it, over what was meant by the man ‘going round’ the squirrel. Likewise, I am not seeking a solution to the

problem of how we define dyslexia; instead, I seek to dissolve the problem. I do so by highlighting that we define someone as dyslexic *de facto* by vague and by normative beliefs about literacy. The explanatory theory of a disorder or dysfunction called dyslexia itself reveals those normative beliefs. Seeking to define dyslexia, I suggest is a pointless exercise which takes us no further in understanding the concept of dyslexia because we have not gained clarity on what such a definition is based on. I am not trying to circumvent the need for a definition; rather I view the project of defining dyslexia as illogical if we do not all understand and agree on what that concept is. We face the very difficulties McFee (2004) highlights, definitions which are too broad, too specific or in fact circular; and none bring us any closer to understanding the concepts of dyslexia and being a dyslexic.

Indeed, seeking a definition for dyslexia, based on necessary and conjointly sufficient conditions has often led to greater confusion and disagreement (see for example, Rice with Brooks, 2004). Smyth et al (2005) have attempted to apply Wittgenstein's idea of 'family resemblance' to *define* dyslexia in a very broad manner to help them circumvent the lack of consensus in the dyslexia debate. The entire point of Wittgenstein's approach is to draw to our attention ways in which definitions can be misleading and result in confusion. However, it is helpful for us to think in terms of 'family resemblance' if we wish to understand the normative conceptions of literacy. Wittgenstein (PI § 67) uses the example of 'games' and suggests that word's meaning in our language has a 'family resemblance'. Wittgenstein (PI § 67) states that: family resemblance is like 'the various resemblances between members of a family: build, features, colour of eyes, gait, temperament, etc. etc'. Wittgenstein (PI § 66) notes 'if you look at them you will not see something that is common to all, but similarities, relationships, and a

whole series of them at that.' Wittgenstein shows us that different uses and meanings of the word 'games' have similarities which overlap and yet also have numerous differences. The similarities in question are the complex set of similarities and differences in a words use and, therefore in its meaning.

Another example of this approach is Wittgenstein's (2001; §§ 156-178) remarks on reading. In the latter part of § 164 Wittgenstein's argument is clarified further; he states that we 'use the word "to read" for a family of cases. And in different circumstances we apply different criteria for a person's reading' (PI § 164). In other words reading, for Wittgenstein, is a 'family resemblance concept'. Reading, for Wittgenstein, has no one essence that can be neatly defined and categorised and indeed it is not possible to define a single essence of reading. Wittgenstein (2001) in PI §§ 156-178 gives numerous examples in detail for why this is so. Logically if 'reading' is a family resemblance concept then therefore 'literacy' as a whole is also a 'family resemblance' concept. Consider 'writing' not as some unitary thing but as made up of different features or aspects; grammar, spelling, handwriting, typing, editing, composition, argument, and so on. Each of these aspects may have a host of different normative assumptions and practices attached to them. Literacy as a concept may include 'writing' and 'reading', however, it might also include under the conception of someone who is 'literate' a wide range of other things, for example, being able to remember a text and demonstrate a comprehension of that text.

Literacy, we can therefore say, has numerous aspects, or features to it. Aspects are features rather than distinct parts of a whole; an example of an *aspect* would be Constable's brushwork in *The Hay Wain* (Culbertson, 2015). As Culbertson (2015) argues, a *part* of the painting might be Willy Lott's cottage. A



vandal *could* cut out Willy Lott's cottage from the rest of the painting; it would *not* be possible to do the same with Constable's *brushwork* (Culbertson, 2015). Aspects are therefore *not* parts; they are features which are integral to the whole. Different aspects can be in the foreground or background depending on how we view them in a given context (Culbertson, 2015). When I assess Riddick's social model of dyslexia in Part 2 of the thesis I examine the aspects of her model.

This philosophical approach to concepts of dyslexia and being a dyslexic is not an attempt to circumvent or avoid understanding such concepts. On the contrary; I am *actively seeking to understand those concepts*. One can only define what one already understands. If we do not understand those concepts we cannot seek to create a definition. While definitions cannot help us understand the concepts of dyslexia and being a dyslexic other methods can. Philosophers and scientists when seeking understanding of a contested or difficult concept often employ thought experiments (Cohen 2005 and Baggini 2005). Thought experiments are therefore an obvious technique to adopt when the purpose is to *understand* a concept, rather than define it. Likewise, comparing and contrasting something which is well understood with something which is not (such as through the employment of an object of comparison), can assist in conveying that understanding more clearly. For this reason methods of establishing and clarifying conceptual understanding are significant if one adopts such an approach to philosophy.

### **(3.4) Two Methods: Objects of Comparison and Thought Experiments**

Within this section I outline two of my principal philosophical methods: the employment of objects of comparison and thought experiments. Objects of comparison are anything we can use to compare and contrast with the

phenomenon or concept one is investigating. I make extensive use of historical examples with which I compare and contrast the key features of dyslexia or Lexism. My purpose is to clarify my argument, enable a different way of seeing dyslexia and enable us to perceive Lexism more clearly. A thought experiment is a hypothetical 'what if' scenario that allows us to see a concept or feature in isolation. Thought experiments provide different ways of seeing what we already know or think we know; they enable us to question our assumptions about, and conceptions of, literacy, dyslexia and education. Both methods are forms of communicating or clarifying the conclusions I have drawn from my philosophising. Neither method provides new information, I am engaging in a conceptual exercise in which existing information is reassessed. To explore objects of comparison further I engage in a brief discussion of an example provided by Standish (2012) in which he compares psychology to witchcraft. I then examine what thought experiments are, how they can be used and the purposes to which they might be put.

Standish (2012) uses the medieval belief in witchcraft as an object of comparison for beliefs in Psychology. His aim is to compare and contrast two different features of two very different world views. Standish (2012: 61) notes that:

witchcraft was not, so it would seem, something to be explained, but rather the basis of explanation, the means by which explanation was possible and one of the ways in which that world seemed to make sense.

In other words one believed in witchcraft and therefore used witchcraft to explain what you could not otherwise explain, and in turn this reinforced your belief in witchcraft. Standish (2012: 61) poses the question: has psychology 'figured in modern consciousness in a parallel way' and acknowledges that what he proposes might be an 'unwarranted exaggeration.' Putting aside Standish's arguments let us

examine his approach; his use of medieval witchcraft as an object of comparison exists in a wider discussion of Wittgenstein's criticisms of psychology. Standish might want to shock, to make us see similarities between two things that may make us uncomfortable. Standish is also drawing on a historical example (medieval witchcraft) which we can now see more clearly. Similarly in later chapters I draw on objects of comparisons which are historical phenomena to illustrate and clarify my argument.

Thought experiments are also integral to my approach. Philosophers and scientists use thought experiments as hypothetical, often absurd, 'what if' scenarios to test out a particular concept in isolation from other concepts (see for example Cohen 2005 and Baggini 2005). Though use of thought experiments as a method is common within both science and philosophy, they are rare in the critique of dyslexia. A notable exception is a thought experiment by Stanovich (2001 ed.); he creates a fictional learning disorder he calls 'dysrationalia', the apparent tendency of some highly intelligent people to be irrational. Stanovich's fictional learning disorder is based on the same criteria used by psychologists to establish the existence of dyslexia. Stanovich's thought experiment is an example of how thought experiments can reveal aspects previously hidden or obscured. In my own thought experiments, I seek to challenge preconceptions or reveal hidden aspects of the conceptual problems of dyslexia or how we view literacy. Some of those thought experiments are published (Collinson, 2012 and 2014). I begin with a brief description of what thought experiments are. I then outline how I integrate thought experiments with objects of comparison.

Thought experiments can enable one to explore and highlight the role of a single concept. Furthermore, as Baggini (2005, ix) notes: 'scientists and

philosophers alike have always used imaginary scenarios to help sharpen their ideas and push them to the limits'. Thought experiments have a clear purpose 'to strip away the things that complicate matters in real life in order to focus clearly on the essence of a problem' (Baggini 2005: ix). Cohen (2005: 115) suggests that thought experiments enable us to test 'assumptions, through imagining a series of logically implied consequences'. In Cohen's (2005) study on thought experiments he discusses how they should be carried out. Cohen (2005) notes that the thought experiment should be kept simple; ideally it will contain a complete argument, must be consistent and should be worded very carefully. An example of a series of good thought experiments would be that of Hume's work on economics (see Cohen, 2005: 38 for a discussion). Hume imagines in *'The Balance of Trade'* what would occur if four fifths of the country's gold and silver coinage ceases to exist and in another if the nation's gold and silver coinage is increased fivefold. In both thought experiments Hume explores the relationship between the amount of coinage available and market prices. He argues that in both cases prices would change in line with the amount of gold and silver available. Hume is challenging a way of seeing the world; that gold and silver has some sort of intrinsic value. This is a good example of a thought experiment.

Thought experiments are related to the use of objects of comparison. In the case of Stanovich's thought experiment, the fictional learning disorder 'dysrationalia' provides an object of comparison for dyslexia. Similarly, in Chapter 9 the fictional society in the thought experiment the Cannae Rememberers is an object of comparison for our own society. Literacy's place in our society is replaced by rote learning and memorisation; this enables us to perceive one concept, or aspect of a conceptual problem, in isolation. Likewise, in Chapter 5, the desire to define the fictional 'Dyscomputics' provides an object of comparison

for the desire to define dyslexics. Thought experiments can therefore function as objects of comparison, enabling us to discern different ways of seeing the world. The thought experiment Three Men and a Time Machine, in Chapter 8, focuses on the conceptual problem; the difficulty of defining dyslexia in different times and places. A reading of history also informs my thought experiments, for history can provide a different way of seeing, though as inspiration rather than a source of evidence.<sup>6</sup>

## Conclusion

In this chapter I set out my approach to the philosophy of education and why the philosophy of education is important. I emphasised the importance of the capacity to be able to philosophise. I identified three problems of methodological significance within the dyslexia debate. I suggested that there is: a general problem in establishing a consensus in how to define dyslexia; a specific problem of a 'discrepancy assumption' between ability with literacy and intelligence. I also argued that there is a much wider problem with seeking definitions as a means to understand. I outlined why I have adopted a particular approach to philosophy, and I noted the philosophers who have influenced my position. I explained two of my philosophical methods: the employment of objects of comparison and thought experiments, and the reasons why I have adopted those methods.

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<sup>6</sup> The history of literacy influences my writing of Three Men and a Time Machine. A reading of Julius Caesar's account of the druids valuing memory over literacy in the *Gallic Wars* inspires the Cannae Rememberers thought experiment. Within this thought experiment I do not mention Caesar; his account is irrelevant as anything other than inspiration.

## **Chapter 4 The mereological fallacy, dyslexia and brains**

### **Introduction**

The focus of this chapter is a critique of the belief that dyslexia can be located in the brain. As Elliot and Grigorenko, (2014: 110) note it is widely accepted that reading is thought to involve ‘a complex system of cognitive processes supported by multiple areas of the brain forming a particular functional system’ that is referred to as the ‘reading brain’. However, reading is an *action*, and it is done by human beings in a particular context. The assumption that it is the brain, rather than the human being, that reads, writes, thinks, believes, intends (and is the proper subject for the ascription of other psychological predicates), is referred to as the mereological fallacy (Bennett and Hacker, 2003: 68-107). I argue that whether someone fails to meet norms of literacy is not *reliant on* the capacities of their brain. For reading is the act of the whole human being in a particular social context, and it is that context which determines what reading is, what failing reading consists in, and what it *means* to fail to read. Empirical studies have, however, made claims that dyslexia is a genetic neurological condition, i.e. something which is in the brain (see for example Beneventi et al 2010, Hoeft et al 2011, Stein 2014, Langer et al 2015, Im et al 2016, Ozernov-Palchik and Gaab 2016a and b).

The psychological predicates assessed to identify dyslexia (reading comprehension, spelling, memory and intelligence) can only, *meaningfully*, be ascribed to human beings, not to brains. As such this is a conceptual matter, not an empirical one. To ascribe such psychological predicates to brains is meaningless, and has logical consequences which results in conceptual confusion. It is human beings that exhibit capacities by what they say and do in

particular contexts. Those capacities are ascribed on the basis of defeasible criteria, which means that there are potentially defeating conditions, but, when those are not present, the defeasible criteria having been met constitutes logically good evidence for ascription of the relevant capacity (Bennet and Hacker, 2003: 63-65). I adopt an approach similar to Wittgenstein, who ‘conceived of the mental as *essentially manifest* in the forms of human behaviour which give[s] *expression* to “the inner”’ (Hacker, 1997: 4 emphasis in original). As Hacker (1997: 4, emphasis in original) notes:

In place of the Cartesian *res cogitans* – spiritual substance which is the bearer of psychological properties, Wittgenstein put the human being – a psychophysical unity, not an embodied *anima* – a living creature in the stream of life. For it is human beings, not minds, who perceive and think, have desires and act, feel joy and sorrow.

Human beings (not their brains) exhibit behaviour by what they say and do in particular contexts. That is, we ascribe psychological predicates (such as reading) to people exhibiting capacities by what they do and say in context, *not* to the capacity itself, and not physiological, including neurological, processes that accompany, or form an aspect of the whole human being exhibiting such capacities.

The structure of this chapter is as follows. In the first section I examine current neurological literature which includes the idea that dyslexia ‘is in the brain’. In the second section, I describe the mereological fallacy, as set out by Bennet and Hacker (2003), and relate this to reading, the concept of dyslexia, and the relationship to debates on ‘brain states’ and ‘mental states’. In the third section, I propose a thought experiment - ‘evil genius’- for the purpose of reasoning that the mereological fallacy (as applied to reading) leads to absurdity. In the fourth section I put forward the thought experiment: ‘An Alternative Present’ (Collinson, 2012). I

argue that social norms have a deciding role in whether or not someone meets expectations of literacy. Both thought experiments enable me to mount an attack on essentialist views of reading. Essentialism, in this instance, is the belief that there is a commonality to all cases in which we predicate reading to someone, which has caused conceptual confusion for both psychologists and neuroscientists (see, for example, Bennet and Hacker, 2003, Harré and Tisaw, 2005). In the fifth section I apply my understanding of Wittgenstein's (PI §§ 150-173) remarks on understanding and reading to further develop my critique of the mereological fallacy, as applied to dyslexia.

#### **(4.1) Neurological conceptualisations of dyslexia**

In this section, I consider the conceptual confusions that has arisen in the work of neuro-scientists work on dyslexia. Recent neuro-scientific literature provides evidence (neurological data) which is seen to relate directly to reading (see for example Langer et al 2015, Im et al 2016, Ozernov-Palchik and Gaab 2016a and b). There are three problems with this literature: first, one cannot ascribe a psychological predicate, like reading, to a brain. In short they view reading to be in the brain, rather than done by an individual in a certain context for a certain purpose. I argue that this is a form of the mereological fallacy. This is also in a distinct contrast to many psychologists who adopt a functionalist position (which I examine in the next chapter). Second, these authors make claims that a difficulty with reading, as evidenced by their neurological data, is 'dyslexia'; furthermore that it is a 'neurobiological condition and is associated with atypicalities in various brain areas' (Ozernov and Gaab 2016b: 12). Third, some (though not all) of those neuro-scientific authors also appear to adopt what is a discrepancy model of dyslexia in all but name.



The conceptual problems within this literature therefore form my target in this chapter. Others have also critiqued this kind of literature; as Elliot and Grigorenko (2014: 109) note:

for these studies to take place, the “target group” to be compared to typical readers has to be defined, and that very definition assumes the existence of a category of reading disability (or dyslexia) that can be reliably and validly identified. Unfortunately, the neuroscience literature of reading contains as many definitions of these terms as do the cognitive and education literatures, and the particular definition employed by each depends on researcher preference.

Such psychological predicates are not easy to define clearly, especially when there are such variations in definition. By assuming reading is purely in the brain the recent neuro-scientific authors fail to realise that the key point is that reading is a social act. Reading to an acceptable standard is defined by societies, and what one society classes as ‘reading’ to the required standard another might not.

As reading is a social act, done by a social actor (a human being), in a social context (a time and a place), has an important conceptual ramification. Whether someone is deemed to succeed or fail in reading is *decided before* someone’s head is placed in a brain scanner. Imagine if someone can read to an acceptable standard, yet the neurological data (acquired through a brain scan) said otherwise, it would be obvious that we would see that the data was mistaken. Reading success or fail cannot be identified by neurological data, and this is a conceptual matter not an empirical one. It is reasonable to suppose that this neurological data does relate to brain functioning, however, the epistemological foundations of the claims made by neuroscientists are problematic.

The problems with neuroscience and its implications for education, and dyslexia, have been critiqued by Bowers (2016a and b). Bowers’ attack on the value of educational applications of neuroscience led to Howard-Jones et al (2016) and Gabrieli (2016) mounting a defence of neuroscience in education. However,

Bowers (2016a and b) critique remains convincing. In brief, Bowers (2016a: 608-609) key points are that:

At present the strong claims regarding the successes of educational neuroscience are either a) trivial, in the sense the recommendations are self-evident, (b) misleading, in the sense that the recommendations are already well established (based on behavioural studies), or (c) unwarranted in the sense that recommendations are based on misrepresentation of neuroscience or the conclusions do not follow from neuroscience.

These are damning criticisms. Gabrieli (2016: 613) acknowledges the value of Bowers' critique, noting: there 'has been an irrational exuberance' in educational applications of neuroscience, and that the 'critical measures of education are behavioural'. However, Gabrieli (2016), disagreeing with Bowers, argues that neuroscience is beginning to make a contribution to education. Bowers (2016a: 604), himself argues that the 'only relevant measure of performance is behavioural, and the only way to assess change in performance is to measure behaviour. Any observed brain changes may or may not have an impact on the relevant behaviour.' This is an important conceptual point, which Gabrieli failed to fully appreciate.

Ultimately it is our behaviour, which is public and observable (not the results of a brain scan) which decides whether someone is, or, is not, reading and spelling to the desired standard. Bowers' concern is to draw our attention to how neuroscientific techniques, like brain scans, tell us nothing of educational value we could not gain through observation. Bowers (2016a) also critiques and dismisses arguments for neuroscience's value with regard to assessing interventions and diagnosis of dyslexia, and other 'learning disorders'. Howard-Jones et al (2016) and Gabrieli (2016) provide less than convincing counter-arguments, and as Bowers (2016b: 630) argues (in response to Howard-Jones et al, 2016) that: 'their commentary reveals a number of theoretical confusions' with regard to his

position. Bowers (2016b: 633) concludes by clarifying that he is claiming that 'psychology is the relevant discipline to improve educational outcomes for all children.'

Though I do not embrace Bowers' last claim I would suggest his criticisms of neuroscience are important ones. For at the core of his arguments (though he does not express it in this manner) is the recognition of an epistemological point. That is: we have the ability to recognise the act of reading is observed through the behaviour of a human being. We *cannot* say the same of a brain, for if the brain scan data provided evidence that someone was not reading, yet the observed person clearly was reading, then the brain scan would be demonstrable incorrect. Bowers' is convincing, it is the observed behaviour in the world (not the brain) which is our epistemological foundation.

Neurological data cannot 'prove' the validity of the concept of dyslexia, because the definition of literacy is socially constructed. The neurological data tells us nothing at a conceptual level about the value of dyslexia as a concept. We already knew, from simple observation, if someone was struggling to meet social norms of literacy or not (Bowers 2016a). Furthermore, we can say that it is a human being in a context who reads; it is not, and never could be, a brain that reads. For to the meaning of 'to read' is decided socially. If it was that brains read we would need to redefine reading in such a way as to fit the neurological data, not our social, ordinary language use of the phrase 'to read'.

Another problem is that several recent neuro-scientific studies seem to adopt a discrepancy model of dyslexia. I give two examples. Langer et al (2015: 1, my emphasis) define dyslexia as a 'brain-based learning disability characterised by difficulties with reading and reading-related skills....that cannot be attributed to *low general cognitive skills*.' Fisher et al (2015: 350) define dyslexia as 'a reading

deficit in individuals who appear to have otherwise normal intelligence'. Earlier literature used similar phrasing, for example Hoefft et al (2011: 361, my emphasis) defined dyslexia as a 'persistent difficulty to read that is not explained by sensory deficits, *cognitive deficits*, lack of motivation, or lack of adequate reading instruction'. Yet other neurological literature seems to acknowledge the flaws within the discrepancy model (for example, Ozernov and Gaab 2016a and b). It is therefore unclear exactly what those authors position exactly is. For example, Ozernov and Gaab (2016b: 11) define dyslexia as failing 'to read as expected', or, dyslexia is 'unexpected failure to develop accurate or fluent reading' (Ozernov and Gaab 2016a: first page. No pagination). The use of the words 'expected' or 'unexpected' are not explain; expected by whom?, at what level? Why is the reading failure 'unexpected'? Yet the same authors recognise that 'literacy is a recent development in human evolution and requires the repurposing of neural circuits' (Ozernov and Gaab 2016a: second page. No pagination).

If reading is expected in 'normal' children to be at certain levels, it is defined by a society, not our brains. There is no nomological relationship between 'reading' (a social act) and our brains (a biological organ). Neuroscientists may wish to claim that the brain functions according to natural laws (that is it can be studied in a nomological manner). In many instances, such as assessing why a new drug reduces pain, this approach has value. Yet literacy is a normative matter (decided at a social level) and therefore it is problematic to study literacy in a nomological manner, if one ignores the normative. In the thought experiment 'evil genius', later in this chapter, I critique further a nomological approach to studying reading. I argue that one cannot reduce reading to just the activity of the brain. In the thought experiment, the alternative present, I argue for the importance of social context in determining who is defined as dyslexic, and who is not.

One might assert at this point the very real difficulties faced by dyslexics, the empirical evidence for those difficulties and the average or above average intelligence of dyslexics. I acknowledge the existence of dyslexics, but reject dyslexia as a theory to explain the existence of dyslexics. I suggest that a confusion has arisen if we take dyslexia to be a neurological problem, when the criteria are not neurological criteria. We assume that what we observe (difficulties with reading and spelling) are symptoms of a neurological problem, but that is taken to mean that they are neurological in nature – that they are ‘neurological capacities.’ Consider two parallel cases: if someone has a cough because they have a chest infection, this is an observed symptom. However, the cough is not the chest infection, it is merely the symptom. Equally, if someone is not good at basketball because they are short, we should not think that their being bad at basketball is the same as being short. The conceptual confusion that ‘symptoms’ (a difficulty with reading and spelling) relate to a neurological condition has led, I suggest, to the mereological fallacy.

The empirical work done in the area of reading means that: ‘it is widely accepted that reading involves a complex system of cognitive processes supported by multiple areas of the brain forming a particular functional system’ (Elliot and Grigorenko, 2014: 110). Whether we can at a conceptual level refer to this as a ‘system’ is open to question, it would be clearer to say when humans read certain parts of their brains seem to show increased neurological activity. However, this system is referred to as the ‘reading brain’ (see for example, Elliot and Grigorenko, 2014). This expression is problematic, because it suggests that it is the brain that reads, rather than the whole human being in a particular context, for a particular purpose against socially judged norms and criteria. Assuming that it

is the brain that reads, rather than the whole human being is a form of the mereological fallacy.

#### **(4.2) The mereological fallacy**

The 'mereological fallacy' usually applies to most psychological predicates not just 'reading' and 'writing'. Bennett and Hacker's (2003: 73, emphasis as in original) definition of the 'mereological fallacy' is that it is:

the ascription of psychological attributes to the brain....Mereology is the logic of part/whole relations. The neuroscientists mistake....[is to ascribe] to the constituent *parts* of an animal attributes that logically apply only to the *whole* animal.

They also acknowledged that they were in effect renaming and reworking the concept that A.J.P Kenny in 1971 had called 'the homunculus fallacy', because Bennett and Hacker (2003: 73 footnote 13) felt this was a misleading term. Bennett and Hacker (2003) frequently make the point that it is the human being who sees, hears, thinks and feels (or similar psychological predicate) not the brain, eye, ear or other body part. Bennett and Hacker (2003: 69 emphasis in original) demonstrate from textual evidence that numerous neuroscientists use phrases which state in effect that: 'the brain *knows* things, *reasons* inductively, and *constructs hypothesis* on the basis of arguments, and its constituent neurons are *intelligent* can *estimate probabilities* and *presents arguments*'.

Bennett and Hacker (2003: 72: emphasis in original) argue that 'these scientists proceeded to explain human perceptual and cognitive capacities and their exercise by reference to the brain's exercise of *its* cognitive and perceptual capacities'. Neuroscientists and psychologists have made three arguments in defence of their use of language. First, that the neuroscientists are employing homonyms which have a different technical meaning to the everyday use of the

same terms. Secondly, that neuroscientists are merely extending the ordinary use of these everyday terms by analogy. Thirdly, that these usages are figurative or metaphorical, not literal. Bennett and Hacker (2003) critique those arguments in detail; pointing out that neuroscientists do not use these words as homonyms; giving textual evidence from the neuroscientists themselves to demonstrate this fact. They also show that the scientists attach new meanings to these words, yet they also confuse these new meanings with the word's old usage. Likewise, Bennet and Hacker (2003) also provide a detailed critique of the extended or analogical use of terms associated with psychological predicates. As they noted, 'the newly extended expressions no longer admit of the same combinatorial possibilities as before' (Bennett and Hacker, 2003: 77). This, as Bennett and Hacker note, generates incoherence. Finally, they point out that neuroscientists mix the figurative and the literal meanings of those words creating further incoherence.

Another problem with the neuroscientists' use of terminology is that those defences are created retrospectively; in other words the neuroscientists, with hindsight, have sought to create an explanation and justification of their use of such terms. However, different writers have developed the three principal and different defences which are thus not necessarily complimentary: suggestive evidence that *they cannot agree among themselves* what they mean.

Neuroscientists have therefore used words describing psychological predicates in a very haphazard and potentially contradictory way and then have sought to justify this after the fact. Innovative word use and analogy are all perfectly acceptable in technical and professional nomenclature if one is clear what one means (for others, not just in one's own mind); however, if neuroscientists cannot agree

amongst themselves then Bennet and Hacker's argumentative analysis is persuasive.

The mereological fallacy applied to reading, is the misconception that it is the brain that reads and not the whole human being. Furthermore, the fallacy is to be found in explanations of reading failure as being found 'inside the brains' of dyslexics, and in the thought that one need not look for any other explanation. Someone who wishes to defend a neuroscientific foundation of reading might choose to argue that we can point to brain activity whilst the brain is being scanned and recognise signs of reading. To assume that one can assess whether someone is 'reading' by brain activity alone is to misunderstand reading. Reading is a social act, defined by human beings (not brains), at a social level. There are a multitude of applications of 'to read' and 'reading' on which human beings agree in social contexts. Brain studies of dyslexics are of limited utility. As Elliot and Grigorenko (2014) argue definitions of dyslexia in the neuroscientific literature are problematic and there is no consensus on defining dyslexics as a group.

There is a further problem with this approach; consider a similar case, although it is not the same - trying to create a definition to clarify the meaning of a word which includes the word you are seeking to define. Logically, you have defined nothing. Taking psychological predicates, such as reading, to be brain states faces a similar problem; what constitutes reading (or failing to read) is decided on at social level. It is what constitutes reading at social level which is then used to assess whether what occurs in the brain relates to 'reading'.

It is also important to distinguish between processes (what goes on in the brain) and the psychological predicate of reading. However, as Ravenscroft (2005) notes, some philosophers have adopted a position (referred to as central state



materialism or the identity theory) that physical states of the brain are the same as mental states. Braddon-Mitchell and Jackson (1996: 95) note that the 'identity theory of mind holds that each and every mental state is identical with some state in the brain.' Pain, for example, is a mental state; the relevant brain state in human beings is usually generalised as c-fibres are firing in the brain (Braddon-Mitchell and Jackson, 1996). Identity theory would hold that therefore pain is c-fibres firing in the brain. However, there is a problem with this, which is referred to as 'multiple realisability'; for example, in dolphins' brains it is d-fibres that are firing when the dolphin is in pain. The brain state is different but the mental state (being in pain) is the same (Braddon-Mitchell and Jackson, 1996). Therefore there are multiple possible neurological realisers of the same phenomena. However, as Ravenscroft (2005) notes, the mental state of pain is hurting, which no brain state could ever have. For it to do so would be the mereological fallacy; a brain cannot be in pain (hurting) only a human being can (Bennet and Hacker, 2003). Likewise, reading as a human activity (and a psychological predicate) has what occurs in the brain associated with it, but we should not confuse this with a conception of reading as a brain state.

#### **(4.3) Thought experiment: 'evil genius'**

To examine the mereological fallacy and identity theory further, in the case of reading, I propose the following thought experiment to enable me to critique essentialist views of reading. An evil genius wishes to *prove* that it is brains that read, and not the human being as a whole. He makes a living brain extraction device, and extracts the brain of his laboratory assistant and puts it into a vat. This thought experiment is influenced by two pre-existing thought experiments: Putnam's 'Brain in a Vat' and Searle's 'Chinese Room' (see, for example,

Braddon-Mitchell and Jackson, 1996, Baggini, 2005, and Burkholder, 2011, for a discussion). I am seeking in this thought experiment to show the problems with both the mererological fallacy and identity theory; to show that it is the human being who reads not the brain.

Experiment 1: the evil genius attempts to show that it is the laboratory assistant's brain which reads. A text scanner is linked to a computer to enable the brain in a vat 'to see' the text. The brain is given electrical impulses by the computer 'to tell' the brain what letters are on the page in what order. Electrical impulses received from the brain to the computer utilises software similar to text-to-voice software to 'read out loud'. However, can we really say the brain read the text? Note the length the evil genius has to go to create reading out loud without the laboratory assistant's body.

Experiment 2: as a control experiment, the brainless body of the laboratory assistant is given impulses from a computer to mimic brain activity to enable the eyes to look at a page, and make the laboratory assistant's hand turn the page. The syntactic properties of the symbols on the page are relayed by the eye's nerve endings to a computer which translates the visual input into sounds. The computer, cleverly programed by the evil genius, provides electrical impulses to the jaw, tongue and mouth of the laboratory assistant who then vocalises the words on the page. Is this reading out loud? Again, we can note the lengths the evil genius had to go to enable the body to read without a brain, yet also note that reading out loud is heavily reliant on not just a brain, but also the whole human being.

The evil genius has been confused by the belief that brain states (what goes on in the brain) and the psychological predicate of reading are one in the

same. In the thought experiment, it is neither the laboratory assistant's brain in a vat or his brainless body that reads; it is the whole human being. Furthermore, it is a whole human being at a particular time and in a particular place, that engages in the act of reading, and does so for particular purposes. However, there is a significant caveat. Functionalists hold that it is the role occupied that is important rather than what occupies it, for example, as in the case of c and d fibers firing in a human and a dolphin brain when they are in pain (multiple realisability). Though we can see from the thought experiment that replacing the brain with a computer program does not equate to reading, or indeed understanding, nor does the brain read. Success or failure in reading is decided at the social level and this becomes more obvious if we consider where the line is drawn, and how that line is drawn.

#### **(4.4) Thought Experiment: 'an alternative present'**

In this section, I propose a thought experiment: 'an alternative present', to critique the essentialist view of reading. Reading is not one thing, but many and socially defined. This thought experiment and its three scenarios consider how the number of dyslexics might remain the same, increase, or decrease, in the light of reforms to English as a written language. My purpose is to highlight the importance of the social context in deciding those who fail to meet norms of literacy. The thought experiment is as follows: let us consider an alternative present. In the past of this alternative present, English usage and structure had been reformed in the 1880s in response to the phonetic spelling movement (see, for example, Lathom, 1872). Therefore in this present, English is *now* a regular language, like Spanish; it is strictly phonetic and has an enhanced alphabetic system to enable this to occur, as laid out by Lathom (1872). In this thought experiment, let us assume for the sake of argument that Lathom's claims to be

able to reform English are correct. This raises a question: would the same individuals who are dyslexic in our reality be so in the alternative present?

Scenario 1 explores how the dyslexic population might remain constant despite the Lathom reforms, and scenarios 2 and 3 consider how the dyslexic population might decrease and increase respectively.

Scenario 1: in this version of the alternative present the dyslexic population remains constant; how could this occur? Consider that in this alternative present the rules of written English, such as spelling, pronunciation of written words, and so on, are now more logical and are easier to teach and to learn. However, the criteria by which ability with this new, more logical English is measured, is correspondingly stricter and less forgiving of mistakes. The need to distinguish between those who are good or relatively bad at written English remains, in order to enable employers and educators to select 'the best'. The result is that the percentage of the population (however one chooses to define dyslexia and however many people one considers dyslexic) remains the same.

Scenario 2: in this alternate reality the number of dyslexics goes down, as the Lathom reforms might intuitively suggest. How might this occur? In this scenario, English has become an easier and more logical language to learn, yet the assessment criteria for it in this variation of the thought experiment remain as they are in our reality. This is because the written language is easier and the marking criteria are those set for a written language which was more irregular and harder to learn than the one now taught.

Scenario 3: now consider the possibility that the number of dyslexics may in fact increase. How might this occur? Although English is more regular and logical, in this version of the thought experiment the marking criteria and measures of literacy are far stricter than our own reality or Scenario 1. How one defines being

'functionally literate' can be vague and open to debate (Payne 2006). In this reality, being 'literate' is defined by being able to read and understand the complex prose in a modern novel. Whereas, in comparison, in the first and second scenarios respectively, being able to read a broadsheet newspaper and a children's book were what defined being literate. Therefore, who is defined as having failed to meet social norms of literacy (that is, who is dyslexic) changes accordingly. How a written language is assessed in prescribed national tests according to age can directly impact on who is deemed to be 'impaired' for failing these norms of literacy.

Those who commit the mereological fallacy would say that the brain reads; those who reject it argue that it is the human being who reads. This thought experiment, however, demonstrates that an impairment 'in the brain', separate from socially constructed norms of literacy, is difficult to discern and essentialist. Let us assume for a moment that neuroscientists carry out brain scans in those three alternative scenarios; what would brain activity tell them? It might show which parts of the brain engage in literacy and are active during 'reading'. However, it would not tell what 'reading failure' or reading difficulty was by merely scanning brain activity. That had already been decided in the world at a social level *before* the brain scan took place. In other words, what counts as 'reading' is not decided by a brain state, but by a social judgement on a psychological predicate.

However, some neuroscientists are less cautious about the dividing line between reading success or failure being socially constructed. Stein (2014), for example, stresses the importance of impairments in the visual magnocellular system of dyslexics' brains and has defended his magnocellular theory of dyslexia (Stein, 2001a and b), in the light of Elliot's and Grigorenko's (2014) criticism of the

concept of dyslexia. In seeking to defend his theory Stein discusses neurological problems, one of which ('motor co-ordination deficits') has nothing to do with literacy (Stein, 2014). He then uses 'motor co-ordination' deficits as a signifier for dyslexia. Stein used serum from the mothers of dyslexic children and injected this into the uteri of pregnant mice. The mice born from this experiment had 'motor co-ordination' deficits. Stein (2014: 277) gives the paragraph, where he describes this experiment, the sub-heading 'Dyslexic Mice', rather than mice with 'motor co-ordination' deficits.<sup>7</sup> Stein has no doubt uncovered information for something, however, we cannot call this dyslexia.

#### **(4.5) Wittgenstein's remarks on reading**

In this section, I consider essentialist conceptions of literacy by applying *my understanding* of Wittgenstein's (PI §§ 150-173) remarks on understanding and reading. I focus on my own capacity for reading as a dyslexic, and the use of a comprehension test to assess a dyslexic's capacity to read and to understand a written text. The neuro-scientific literature examined in the first section reveals a view of reading being located in the brain (see for example Beneventi et al 2010, Hoeft et al 2011, Langer et al 2015, Im et al 2016, Ozernov-Palchik and Gaab 2016a and b). Yet in the first thought experiment ('evil genius') I argued that it is the whole human being that reads, we cannot just ascribe reading to the brain, though we can also understand how the brain plays a role in enabling someone to read. Indeed because the brain does enable someone to read we are tempted into thinking that it is brain, and not the human being that reads. Yet in the case of reading aloud, used as an example in the thought experiment, this cannot be the

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<sup>7</sup> One is tempted to ask, what would a non-dyslexic mouse look like?

case, and yet we would still talk of reading, for reading refers to all such social actions, not purely some, we call reading. In the second thought experiment ('an alternative present') I explored how the educational context of what is defined as literacy can change our definition of who succeeds and who fails in reading, and thus who is defined as dyslexic. Dyslexia is not then in the brain of the dyslexic, nor could it ever be so, as reading is more complex than the neuro-scientific literature would seem to suggest.

Wittgenstein explores this complexity in the *Philosophical Investigations* has several highly detailed 'remarks' on reading (§§ 156 to 171). His remarks are complex and open to misinterpretation. Harré and Tissaw (2005: 90) note Chomsky's (1969) attack on Wittgenstein's discussion of reading: they suggest that Chomsky misses the point of the discussion. Chomsky 'is orientated towards finding a "mental structure" behind a cognitive and normative skill' (Harré and Tissaw, 2005: 90). That is, a mechanistic causal explanation for a process defined by necessary and conjointly sufficient conditions: when it is precisely this idea that Wittgenstein is attacking. Wittgenstein (PI §164) dismisses essentialist attempts to define reading: 'In order to find the real artichoke, we divested it of its leaves'. Wittgenstein uses different contextual variations to demonstrate that what we mean by 'reading' is different in different situations and contexts. This is the method that I adopt in this section to reject essentialist conceptions of literacy.

The problems with simple definitions of literacy (or even just reading) in our ordinary language use should make us cautious of adopting an essentialist definition. As Harré and Tissaw (2005: 93) note: Wittgenstein (PI § 157) attacks such essentialist beliefs, as he emphasizes 'the spectrum of cases between "can read" and "cannot read"'. That is, what we mean by 'reading' has to take into

account the almost infinite possible contextual variations of 'reading': this creates problems for essentialist interpretations of literacy. There is a further problem, as Howard-Jones (2008) highlights. There are dangers of working at the interface between Neuroscience and Education, which can lead to conceptual confusions. He notes the specific case of reading acquisition and dyslexia and cautions against assuming that cognitive neuroscience can provide a complete explanation of how people learn to read, which ignores education or other factors. What is meant by literacy, or just reading, is so wide that caution is necessary.

Wittgenstein (P.I §164) states that we 'use the word "to read" for a family of cases. And in different circumstances we apply different criteria for a person's reading'. Let us apply Wittgenstein's approach to a specific dyslexic and their reading: ultimately focusing on a comprehension test but to begin merely with 'reading'. I will use myself purely as an example: on occasion I read, understand and comprehend a text by 'reading' the patterns of the words rather than individual letters and phonetic structures. Therefore, 'donkey' and 'door key' have very similar patterns: yet the contexts in which they are used in the language are very different. I can therefore 'read' and understand a text without reading every word or letter correctly. This is certainly how I would read an historical text because I have pre-existing knowledge which enables me to do so; yet, whilst reading a subject new to me I would have to 'read' much more slowly and carefully. This then, is the same individual with the same capacities reading for the same purposes, yet the nature of the text (whether I have pre-existing knowledge on the subject) changes how fast or well I 'read'. In both cases I am 'reading'.<sup>8</sup> However,

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<sup>8</sup> Surprisingly, given the usual government rhetoric on reading, the white paper *Educational Excellence Everywhere* (DfE, 2016: 89) in sections 6.3 and 6.4, acknowledges research which suggests something similar in terms of relationship between reading and prior knowledge.



necessary and conjointly sufficient conditions would be unhelpful because this wide contextual variation cannot be factored into any neat definition of 'reading'.

It is important to highlight at this point that this is a wide variation in just one dyslexic; consider the even wider possible variation amongst the dyslexic and non-dyslexic populations as a whole. Let us now consider a new variable: how can my reading skill be usefully compared to a non-dyslexic reading the same historical text? Let us assume that the non-dyslexic has no historical knowledge or training. As someone unfamiliar with that particular historical period, the terms commonly used, or the meanings attached to them, it might be said that their comprehension of the text would be less than mine.

This simple scenario, to a certain extent, undermines the reading comprehension test as a categorical statement on someone's capacity to read. It would be fair to argue that given a text that neither I nor the non-dyslexic had seen before, on a subject both of us were ignorant of, the non-dyslexic is far more likely to score higher in this test than me. The problem is that the reading comprehension test has to eliminate all the variables, i.e. real life, to be effective. The texts used in comprehension tests are not therefore a piece of 'real' reading in the world. A reading comprehension test does indeed reveal a difference in scores between a non-dyslexic and a dyslexic, but it is one step removed from our everyday use of the word 'reading' as to be of questionable value in measuring the act of reading. The psychologist has imposed their own artificially constructed conditions to create this reading comprehension test. The test itself does not define 'reading' in all its complex variety or indeed my 'dyslexia': if I fail to score as highly as a non-dyslexic. Consider for a moment that in my undergraduate honours cohort I was the only dyslexic studying Ancient History and History and

the only student out of twenty or so undergraduates in that cohort to gain a first class degree. In other words, in a real life situation my 'reading', comprehension, retention of information and written articulation of that information was higher than twenty or so non-dyslexics who would have scored more highly than me in a reading comprehension test.

Unlike the non-dyslexic with no historical knowledge, my fellow students had historical knowledge to aid their understanding of the texts, were able, intelligent, and on the whole, hard working. One might argue that my specific case is different, perhaps. If so, however, then the reading comprehension test cannot claim universal accuracy, although psychologists might be equally sceptical about the accuracy of the comprehension test. In either case, what therefore is its function if it is so removed from the world; from the act of 'reading'? Wittgenstein would appear to be right; what is meant by 'reading' is highly sensitive to context. One might counter this argument by saying that I was more motivated and/or hard working than my peers; even if true, however, those would be further contextual variations that added to my act of 'reading' for my exams and essays. Therefore, what a reading comprehension test is actually testing is only a rather limited and narrow form of understanding of written texts which does not treat 'the cognitive skill as a whole' (Harré and Tisaw, 2005: 102). This is not to say that a comprehension test has no value: it does have some limited value as a measure of reading ability, but beyond this we should be cautious.

Attempts to measure reading and understanding through comprehension tests reveal a simplistic belief in a single 'literacy', in this case a single psychological predicate we can call 'reading'. On the contrary, I do not read in one way, to engage in one task, with one result. A brain scan and similar evidence of

brain activity would have been recording different tasks (all called 'reading'). As an undergraduate I was in a particular time, place and context; being judged and assessed by particular criteria as to whether I had read and understood my subject well. It was not my brain that studied, read, revised and wrote; I, as a whole human being, studied, read, revised and wrote. A brain cannot study, revise and write, therefore how can it read? This is not playing with words. The essentialist view of literacy (that it is a single, simple thing) leads one to look for reading 'in the brain' rather than in the world. If we read or fail to read in the world this can be discerned at a social level (as in the thought experiment, an alternative present). Success in one form of reading (when I read for my exams and essays) does not mean that I would have success in another form of reading (a psychologist's comprehension test).

## **Conclusion**

In this chapter I highlighted examples of recent neuro-scientific literature on dyslexia. I explained the mereological fallacy (Bennet and Hacker, 2003) and related it to reading and dyslexia. I proposed two thought experiments: 'evil genius' and 'an alternative present'. In both thought experiments I critiqued essentialist views of reading. What counts as reading, or what we define as not reading, cannot be decided by looking at the brain but within our social beliefs about reading. I applied my understanding of Wittgenstein's remarks on understanding and reading to a reflection on my own social acts of reading as an undergraduate. I have argued that reading is not one thing, but many different social acts carried out in different contexts, for different purposes by human beings, and not by brains alone.

## **Chapter 5 The problem with seeking to define dyslexia**

### **Introduction**

Within this chapter, I argue that the desire to define a literacy-based disorder (dyslexia or equivalent term) within systems of classification reveals features of Lexism. My purpose is to enable those who believe in dyslexia (including dyslexics), to perceive Lexism, and reject dyslexia. It is not my purpose to dismiss the practical or conceptual uses to which such systems of classification may be put by practitioners. Nor am I arguing that such systems hold a misconceived view of literacy difficulties *per se*; though they might. Rather, I argue that to obtain conceptual clarity such systems of classification are unhelpful to us if we seek to persuade dyslexics, and those who believe in dyslexia, to abandon the concept of dyslexia.

In the first section I propose a thought experiment, the ‘Dyscomputics’. By engaging in a thought experiment I highlight how social beliefs and educational priorities might operate to mislead us into defining difficulties with a socially valued practice as a disorder. Our social beliefs and educational priorities create a desire for a definition, specifically one based on necessary and conjointly sufficient conditions. In the second and third sections, to enhance my analysis further, I engage in a detailed examination of the necessary and conjointly sufficient conditions of the World Health Organisation’s (WHO) (1994), and American Psychological Association’s (APA) (1994 and 2013) definitions’ of terms equivalent to dyslexia. These have been chosen as the primary diagnostic manuals by which professionals define a range of ‘conditions’, including dyslexia. The APA and WHO documents, provide, therefore, definitions of equivalent terms to dyslexia which are authoritative and widely accepted. In the fourth section, I focus on the

discussion within the British Psychological Society (BPS) on dyslexia as concept; I also emphasise and clarify why I focus on the discrepancy model of dyslexia in later chapters of the thesis.

### **(5.1) Thought Experiment: The Dyscomputics**

This thought experiment proposes a parallel case to that of dyslexics; where a desire for a definition is itself an aspect of the problem. Furthermore, this desire for a definition reveals societal beliefs and expectations similar to, but not the same as, Lexism. Imagine a society in which a capacity with computers is seen to be synonymous with intelligence. Those with a difficulty in using computers, for whatever reason, yet who retain intellectual ability, are deemed “Dyscomputic”. It is believed in this alternative society that Dyscomputics are a strange aberration or paradox that requires explanation. Scientists in this alternative society seek to find the ‘Dyscomputic gene’. Brain scans are carried out on the Dyscomputic and non-dyscomputic population. It is found that specific areas of the brain are more active when someone is capable of using a computer well, and less active when they are incapable of using a computer well. Consider for a moment what this might mean and the similarities with the ‘dyslexia debate’. The similarities and differences between our society and the alternative society are clarified in the two below tables.

**Table 5.1 ‘Computer literacy’ and literacy in our society**

<b>Key features</b>	<b>‘Computer literacy’</b>	<b>Literacy</b>
Practical value	Yes	Yes
Common social practice	Yes	Yes
Popularly linked to intelligence	No	Yes

**Table 5.2 ‘Computer literacy’ and literacy in the society of the Dyscomputics**

<b>Key features</b>	<b>‘Computer literacy’</b>	<b>Literacy</b>
Practical value	Yes	Yes
Common social practice	Yes	Yes
Popularly linked to intelligence	Yes	No

From *our* perspective it is obvious that to even think of a ‘Dyscomputic gene’ is ridiculous. Likewise, brain scans carried out on the Dyscomputic population explain nothing of *conceptual* value; it tells us nothing *conceptually* significant we did not already know. A brain scan can provide empirical data and details, however, it cannot justify the presumption that a capability with computers can be used as a normative criterion. A brain scan cannot ‘prove’ the existence of, or value of, the idea that there is such a thing as a Dyscomputic gene or a disorder called ‘dyscomputia’. Within this alternative society we might talk of the socially constructed disability of being Dyscomputic, and furthermore point to the attitudes and beliefs that construct it as disability. Studying or talking of ‘dyscomputia’ (if viewed as a disorder or defect rather than as a relative difference) does not fulfil any useful purpose; it merely adds to the confusion which already exists within this alternative society.

In this alternative society, as in our own, there is a danger that this narrow view of intellect could serve to misdirect practitioners with the result that individuals are marginalised for being different. It is important to consider what these alternative conceptions of intellect might be. I have chosen five positive attributes, which are not exhaustive, merely indicative. These are: (i) originality of thought; (ii) intellectual curiosity; (ii) intellectual maturity; (iv) ‘seeing the big picture’ and (v) an ‘eye for detail’. Originality of thought I take to be the capacity to think through problems for oneself, to be an original, imaginative and a deep

thinker. Intellectual curiosity is the inclination to be fascinated by the complexity of intellectual problems. Intellectual maturity is the ability to accept being mistaken, the willingness to be open minded, to acknowledge publicly one's mistakes for the purpose of furthering one's own learning or to develop new ideas. 'Seeing the big picture' is the ability to see or notice the wider context; to appreciate how different areas of knowledge relate to each other and the appropriate connections one might make between them. An 'eye for detail' is to see or notice the depth and richness of knowledge; to appreciate the importance of that depth and richness of knowledge. Those positive attributes have their negative counterparts, which we would recognise as anti-intellectual or intellectually limiting, both are included in the below table.

**Table 5.3 Intellectual attributes *not* associated with either Literacy or Computer Literacy.**

<b>Positive</b>	<b>Negative</b>
Originality of thought	Rigidity of thought/lack of imagination
Intellectual curiosity	Lack of intellectual curiosity
Intellectual maturity	Intellectually immaturity; an unwillingness to learn
'Seeing the big picture'	Inability to notice or see the wider context
'An eye for detail'	Inability to notice or see details

Those scientists and educationalists, in that alternative society, who believe in 'dyscomputia' are perfectly cable of realising that Dyscomputics are not stupid due to other positive intellectual attributes which Dyscomputics might have. These might include originality of thought, intellectual curiosity and so on, or indeed other features of intelligence I have not listed. Possession of those attributes might mean that there are Dyscomputics with the capacity not only to be university graduates but also academics. However, consider for a moment the practices of this alternative society, to succeed academically and gain university entry one

must be highly computer literate. Indeed education policies, structures and assessments in this alternate society might be all based on the presumption that a lack of computer literacy equates to a lack of intellect. In such a society we may talk of both beliefs and attitudes which Other Dyscomputics; as well as practices and expectations which discriminate against them. It would be conceptually clearer and more just within such a society, to focus on, and study, why Dyscomputics are Othered and discriminated against; rather than focus on or seek to study 'dyscomputia'.

If one compares this alternative society and its Dyscomputics with our own society and dyslexics we can see that there are strong similarities. The norms and expectations of both societies (and the existing intellectual strengths of both Dyscomputics and dyslexics) result in similar conceptual confusions; that there is such a thing as 'dyscomputia' or dyslexia. Likewise the conceptual confusion might exist that if one denies the existence of 'dyscomputia' or dyslexia one is simplistically asserting that Dyscomputics or dyslexics are somehow lacking in intellect. It could be argued, that in both cases a psycho-medical label is introduced to challenge such misconceptions. Yet at the same time in both our own, and the alternative society, normative criteria (literacy and computer literacy respectively) are retained by policy makers and educationalists as a means to assess and judge the intellectual potential of the population. In our society therefore we may talk of both beliefs and attitudes which Other dyslexics; as well as practices and expectations which discriminate against them. The collective noun for these beliefs and attitudes; as well as practices which discriminate, I term Lexism.



Now let us consider an extension of this thought experiment. Imagine that in this parallel society, lobbying groups exist which place pressure on governments and psychologists to recognise the existence of Dyscomputia. Within this parallel society there exists a psychological association that produces a manual in which various 'disorders' and 'difficulties' are defined and outlined, and this runs to several editions. Within this manual Dyscomputia is defined and named in early editions, but later editions conceptualise Dycomputia in a different manner, as a purely 'functional difficulty'. Later editions of this manual also give it a different name – 'Specific Computer Difficulties'. The lobby groups and some of the psychologists continue to use Dycomputia; the psychologists who write the manual, however, claim that their definition is the correct one because it is the official term of their association.

Now let us analyse this extension of the thought experiment. It would seem reasonable to suggest that the exact definitions and nomenclature used do not in any way make Dyscomputia or 'Specific Computer Difficulties' useful concepts. However one chooses to define them, a fundamental problem is *having a definition at all*. We need only recognise that some struggle to use computers, which is a simple observation, not a 'thing' that can, or should, be given a name. Likewise, I argue that dyslexia (or any equivalent term adopted) is not a useful concept (or series of conceptions) because similar to Dyscomputia, it is unnecessary and misleading. In the thought experiment, it hardly matters if the psychological association manual has shifted to a functional definition of Dycomputia, and has given it a new name, Specific Computer Difficulties. The use of definitions are in themselves disingenuous because they disguise the nature of why Dycomputics exist. The existence of the Dycomputics arises from the social attitudes and beliefs of this parallel society. Likewise, I suggest that renaming

dyslexia (by whatever name), or, reconceptualising dyslexia as purely functional, does not enable us to escape the trap that we have fallen into. I assess those beliefs and attitudes below, as they appear in WHO and APA documents. My purpose is to assess the extent to which a desire to define difficulties with literacy and memory (dyslexia) is similar to 'dyscomputia' within the thought experiment, regardless of the term used, or, whether the conception for that term is based on a functional argument.

## **(5.2) World Health Organisation; ICD-10 and the ICF**

In this section I explore the necessary and conjointly sufficient conditions for dyslexia as suggested by the WHO, I then draw out similarities with dyscomputia. I draw on two documents. First, the *International Classification of Mental and Behavioural Disorders* (ICD 10) (WHO, 1994); second, the *International Classification of Functioning, Disability and Health* (ICF) (WHO, 2001). In the ICF the WHO (2001) states that these two approaches to defining Health should be used in conjunction. WHO (2001: 4) notes that the 'ICD-10 provides a "diagnosis" of diseases, disorders and other health conditions and this information is enriched by the additional information given by ICF on functioning'. It is for this reason that I examine the necessary and conjointly sufficient conditions in ICD-10 (WHO, 1994: 268) for 'Specific reading disorder', the WHO's alternative term for dyslexia. I then examine the ICF (WHO, 2001) for how this information may have enhanced the WHO's conception of dyslexia. The ICF claims to integrate the medical and social models of disability in an attempt 'to achieve synthesis, in order to provide a coherent view of perspectives of health, from a biological, individual and social perspective' (WHO, 2001: 20).

The ICF provides classifications at four levels: 1) body functions and structures; 2) activities and participation; 3) environmental factors; and lastly, 4) personal factors. 'Learning and applying knowledge' is included within activities and participation (WHO, 2001: 14). Drawing on ICD-10, Ratner and Efimova (2014: 424) consider 'functioning' to mean 'any kind of activity or participation in social life', and likewise, 'disability' to mean 'any constraints in activity or participation'. Therefore, one might suggest that the ICD-10 provides the definition (based on necessary and conjointly sufficient conditions) and the ICF provides the framework to understand that definition. The ICD-10 is also significant because it has influenced the APS's DSM V. As Richardson (2015) argues, the APA aligned the categories used in the DSM V with those used in the WHO's ICD-10. Likewise, Ratner and Efimova (2014) argue that the WHO ICD-10 provides a 'common language' for specialists, teachers and parents. However, the Russian version of ICF has existed for ten years on the WHO website yet the 'knowledge of experts about this Classification is extremely limited' (Ratner and Efimova, 2014: 425). It is therefore unclear, in the case of Russia, to what extent ICD-10 has actually been used and disseminated, compared to North America where it has clearly influenced the APA's DSM V.

The ICD-10 (WHO, 1994) is similar in some regards to the APA (1994, 2013) definitions examined in the next section. The ICD-10 gives two possible ways of defining the child's difficulty with literacy. First, 'reading accuracy and/or comprehension that is at least 2 standard errors of predication below the level expected on the basis of the child's chronological age and general intelligence' (WHO, 1994: 268-269). The alternative criterion is a history of reading difficulties which meet the first criterion at a younger age and a current spelling test score, again 'at least 2 standard errors of predication below the level expected' in terms

of age and intelligence (WHO, 1994: 268-269). The exclusion criteria include visual or hearing impairments, neurological disorders, inadequate schooling, or an IQ below 70. The ICD-10's criteria for 'Specific reading disorder' seem to be, therefore, in essence the traditional 'discrepancy' model of dyslexia (see for example Miles and Miles 1999). The necessary and conjointly sufficient conditions for 'Specific reading disorder' are difficulties with literacy below that which is socially expected for that child's age, that cannot be explained by poor schooling, low intelligence or some other form of impairment.

The ICD-10 is clear that such 'disorders' are 'not due to any form of acquired brain trauma or disease' (WHO, 1994: 268). The use of the word 'disorder' is unhelpful here, even if this is based on notions of functioning (practicality), and a means to assist with that functioning (social rule following). I would suggest that the WHO's ICD-10, the APA's DSM IV and V, and similar documents, only provide part of the story. They do not provide *clarity* on the whole of the problem; the Othering and discrimination that exists within our society. Such documents might form the basis to explain the *practical difficulties* a dyslexic might face, but *not* the *social prejudice*. If the WHO ICD-10 use such terms as 'disorder', I would suggest this is open to misinterpretation and will lead to greater conceptual confusion amongst the ordinary population, even if psychologists are clear amongst themselves what they mean by such terms. Words like 'disorder', such as 'deficit', 'impairment', and 'disability' have caused confusion because different scholars (and more importantly wider society) places a range of different meanings (concepts/conceptions) on such words; those words are what Travis (2006) calls 'occasion sensitive'. That is, the occasion of the utterance can change the meaning; there is no set parameter for such a word's use, yet normally we understand what is meant in that context (Travis, 2006).

Problems arise, however, if one insists that one meaning is the *only* correct meaning, or, that one group can decide how such words (and the concepts associated to them) are used. As 'disorder' in our ordinary language use is associated with a pathology which is innate (and not associated with environment) then its use to mean something else can and will be misconstrued. Another term open to misinterpretation is 'deficit'. Norwich (2009), for example, mounts a critique of Riddick's (2001) social model on this basis, to a certain extent in defence of ICF (WHO, 2002). Norwich (2009) argues that there is a weakness in the arguments made by the critics of the medical model of disability (such as Riddick) because they fail to distinguish between two meanings of (i.e. concepts associated with) the word 'deficit'. The two meanings being first, 'a functional difficulty that arises from an interaction of a child and environmental factors', and second an 'inherent' difficulty, which presumably rejects or excludes environmental factors (Norwich 2009: 182). To be clear, I would accept that dyslexics become 'dyslexic' because of a difficulty to meet social norms because of *their own biology* as well as 'environmental factors' with which they interact.

However, using the term *deficit* to describe difficulties with literacy lacks clarity. It is hardly surprising that Riddick and other opponents of the medical model find this confusing. Technical terms and their meanings are acceptable if there are clear necessary and sufficient conditions for their use. If, as Norwich (2009) argues, there is more than one meaning, then it is hardly surprising that a lack of clarity follows from this. Indeed, one could suggest that 'deficit' ceases to be a technical term in this instance, and becomes part of our ordinary language use. What is true for the term deficit is perhaps also true for terms such as impairment and disability. Norwich (2009: 182) suggests that to argue, as Riddick does, that:

society transforms an impairment, like phonological impairment, into a disability, like dyslexia, is to assume that only social factors are active and that a phonological impairment has no influence on the process of learning to read and write. The social model does redress the balance away from an over-emphasis on the determining influence of impairments that ignores contextual factors. But, it goes too far in then denying such influences altogether.

Furthermore, Norwich (2009: 182) argues that the uses of those terms (impairment and disability) are 'vague' and used in 'different ways in different contexts'. I would agree, but such terms are, I suggest, 'occasion sensitive' (Travis, 2006).

However, someone might wish to counter that the use to which Riddick, and others, put these terms is in fact to express technical meanings, but (as Norwich points out) they do so in a way that lacks clarity.

I am not disagreeing with those who argue that dyslexia is a difficulty to function to meet social norms of literacy, I am trying to enable us to see Lexism, but making a distinction between (i) the *social prejudices* that Other dyslexics, and (ii) the *practical and functional* difficulties of being dyslexic. These are two distinct things. Being dyslexic, is to be the Other, this has an only a limited relationship with functioning; it is social prejudice. Yet the WHO's ICD-10 fails to recognise the Othering. It may be a useful document in terms of practical application but this is not *my* focus; I am seeking *conceptual clarity* for dyslexics, and those who believe in dyslexia. The use of the words 'disorder' or 'deficit' will not assist a dyslexic to reject dyslexia as an explanation for their experiences. The WHO ICD-10 and the DSM (IV and V), lacks clarity which does not assist dyslexics recognise, and then oppose, Lexism.

The practical utility (or not) of these documents (ICD-10 and DSM IV and V) is not my focus. I am seeking conceptual clarity for dyslexics (and those in the dyslexia lobby) the majority of whom are not psychologists familiar with the nuanced meanings of such words. Reconsider the thought experiment the

Dyscomputics. In our own social context a lack of ability with computers, or noticeable difficulty with learning how to use computers would indeed be a difficulty to fulfil an important social function, would we call it a *deficit*? Would we call it a *disorder*? Would such nomenclature be helpful in our ordinary language use? The obvious answer to those questions is 'No'. Furthermore, in the thought experiment; for the Dyscomputics do the terms 'disabled' and 'impaired' meaning anything significant? Arguably not. One could say that in one sense the Dyscomputics are indeed both disabled and impaired; for their society does indeed disable them further (in the sense of Othering) than just their actual difficulties with computers.

To return to Norwich's point, it is fair to reject Riddick's social model as vague in distinguishing between impairment and disability, it is also reasonable to reject the social as 'all the story' (so to speak). However, we cannot dismiss the social in the role of defining who and what dyslexics are. If there was an equivalent impairment to a phonological impairment for Dyscomputics it is hard to imagine what that would be. However, there might indeed be a series of 'impairments' (if that is the appropriate word) that might lead to someone having difficulty in using a computer. However, learning to use computers does not fit within the same normative framework as learning to read and write. If it did, arguably, it might also exist within the WHO ICD-10, and the APA DSM IV and V. I would suggest, it is the Othering (Lexism) that led literacy difficulties (or 'dyslexia') to be placed in the ICD-10 and the DSM.

The ICF claims to integrate social and medical models of disability to provide a framework in which the ICD-10 can be understood. Indeed it has complex coding rules (see for example WHO 2001: 219-233). This approach is referred to as "Biopsychosocial" (WHO, 2001: 20). The bio-psycho-social model,

that Norwich (2016) favours, may indeed be useful for psychologists and educationalists in a classroom setting. I am not making claims for or against such a model here. However, for someone who refers to themselves as a dyslexic this model is inadequate to provide *conceptual clarity*, if one's purpose is to encourage other dyslexics to reject dyslexia as a useful concept. The biological and psychological elements of such a model will inevitably lead the 'dyslexic in the street' (so to speak) to assume that dyslexia as a concept can remain unchallenged. The bio-psycho-social model (regardless of whether it is correct or incorrect) is also an inadequate challenge to the dyslexia lobby. Dyslexia *has to be seen for what it is*, a Lexist term, to do so one must first recognise the existence of Lexism. Literacy difficulties may indeed be the interaction of the child with their environment, but being dyslexic is subtly different. Being 'dyslexic' can be a matter of self-reference, or, how another refers to you, it includes experiences of prejudice *not just* practical functional difficulties.

Riddick's social model would seem to fit within the ICF approach to 'functioning' within a society. What is significant is the assumption of what is 'basic' and what is more advanced 'functioning'. 'Learning to read' and 'learning to write' are defined as functions under ICF chapter 1 of 'Activities and Participation'; they are situated under the sub-heading 'Basic learning' (WHO, 2001: 39). 'Reading' and 'Writing', in the sense of more 'advanced' comprehension and composition, also occur in the section headed 'Applying knowledge' (WHO, 2001: 3). Under the heading of 'Communication', 'receiving written messages' and 'writing messages' are two further headings (WHO, 2001: 39-40). Learning to read is defined in terms of 'the competence to read written material' in a basic sense (WHO, 2001: 125). 'Reading' is defined as 'the comprehension and interpretation of written language' (WHO, 2001: 127); learning to read is specifically excluded from this definition by



the WHO. Similarly, 'learning to write' and 'writing' are treated as separate. Correct use of grammar and spelling is deemed 'basic' and therefore included under learning to write but writing a letter is defined as writing in the more advanced sense (WHO, 2001: 125 and 127). The ICF distinguishes between 'Activities', in which literacy is included, and education, employment, and so on, which are listed under 'Participation'.

To what extent ICD-10 and the ICF can be used in conjunction with each other in any meaningful way, in the case of 'Specific reading disorder' (dyslexia), is open to question. The ICD-10's (WHO, 1994: 268) necessary and conjointly sufficient conditions for 'Specific reading disorder' relies on a discrepancy between reading performance and 'intelligence' which cannot be explained. Both the ICF and ICD-10 leave the social norms that assume a link between the two things unquestioned, despite the ICF's claim to the contrary. The ICF gives a number of 'Case examples'. The most relevant example is of how a child with a mental impairment might experience significant problems in an 'environment of competition and high scholastic expectation', but not where the social 'population norm or standard' is otherwise (WHO, 2001: 239). This 'Case example' is close to Riddick's social model of dyslexia in that the underlying impairment is deemed distinct from cultural factors. The argument might be that a dyslexic in a pre-literate society has less of a limitation in their 'capacity' to function than a dyslexic in a literate society. The problem with the ICF model, similar to that of Riddick's model, is that the 'impairment' can be mistakenly seen as distinct from social factors.

If we compare ICD-10 and the ICF with 'dyscomputia' there are some significant similarities. Most important is the desire to classify and explain those

who do not meet socially valued expectations. One might ask to what extent the writers of the ICD-10 and ICF are any more sophisticated than the scientists in the alternative society, as set out in the thought experiment. The ICD-10 and the ICF presuppose a particular way of looking at literacy. 'Basic' literacy in the ICF is what we might term the propositional knowledge of literacy; the rote learning aspects that dyslexics struggle with. The more 'intelligent' form of original thought expressed in the composition of writing is seen as 'higher' and distinct. The danger with this belief is that an inability with 'lower' or more 'basic' forms of literacy, yet a competency to compose texts, might be seen as a contradiction if the first is seen as the foundation of the second. The ICD-10's 'Specific reading disorder' as a definition relies on an unexpected failure to meet the requirements of 'basic' literacy despite average or high IQ. In so doing the ICD-10 and ICF engage in a conceptual confusion similar to 'dyscomputia'. Literacy has practical value, is a common social practice and in the popular mind associated with intelligence. However, a difficulty with literacy does not justify its inclusion in a list of 'disorders'.

### **(5.3) The APA's DSM, 4<sup>th</sup> and 5<sup>th</sup> Edition**

In this section I examine dyslexia's necessary and conjointly sufficient conditions within the 4<sup>th</sup> and 5<sup>th</sup> edition of the Diagnostic and Statistical Manual (DSM) of the American Psychological Association (APA) (1994 and 2013). Since the third edition of the DSM in 1980, the manual has become the key document of American mental health professionals (Mayer and Horwitz, 2005). The DSM IV and DSM V use different terms for dyslexia. DSM IV (APA, 1994: 46) refers to 'Learning Disorders' and that these were formerly known as 'Academic skills disorders'. Included within this term are 'Reading Disorder' and 'Disorder of

Written Expression'. The APA (1994: 48) notes that 'Reading Disorder....has also been called "dyslexia"'. However, when discussing 'Disorder of Written Expression', it makes no similar acknowledgement suggesting that APA view dyslexia as strictly speaking a reading disorder, although they acknowledge the co-occurrence of the two 'disorders'. The DSM V (APA, 2013: 66) refers to 'Specific Learning Disorder' which includes difficulties with reading, spelling and mathematics. The DSM V (APA, 2013: 67) states that 'Dyslexia is an alternative term used to refer to a pattern of learning difficulties characterised by problems with accurate or fluent word recognition, poor decoding and spelling abilities'.

DSM IV states that 'Learning Disorders are diagnosed when an individual's achievement on individually administered, standardised tests in reading, mathematics, or written expression is substantially below that expected for age, schooling, and level of intelligence' (APA, 1994: 46). The discrepancy should be shown to be statistically significant, which is defined as 'more than 2 standard deviations between achievement and IQ' (APA, 1994: 46). DSM IV suggests that the 'Learning Disorder' may arise for a multitude of reasons, including 'genetic predisposition, perinatal injury and various neurological or other general medical conditions' (APA, 1994: 47). This is notably different from the WHO's ICD-10 which excludes neurological or other medical conditions. DSM IV seems to adopt a multiple causal model for dyslexia. DSM IV seems to be 'practical' in intent; it notes that 'learning problems significantly interfere with academic achievement of activities of daily living' relevant to literacy and mathematics (APA, 1994). DSM IV's necessary and conjointly sufficient conditions for dyslexia are a discrepancy between perceived intelligence or IQ and a failure to meet expectations of literacy. A difficulty with literacy, but lower IQ, is deemed by DSM IV to disqualify the individual as having a 'Learning Disorder' (APA, 1994). In other words the

discrepancy relies on an assumption that intelligence *should* result in a capacity with literacy.

DSM V states that 'Specific Learning Disorder' can be diagnosed if 'symptoms....have persisted for at least 6 months, despite the provision of interventions that target those difficulties' (APA 2013: 66). The list of symptoms includes difficulties with reading, spelling, grammar and mathematics. Only difficulty with one 'symptom' on this list for more than 6 months is required for a diagnosis of 'Specific Learning Disorder'. Again, as with DSM IV, there is a reliance on an assumption that the intelligent should have a capacity for literacy. The DSM V's exclusion criteria listed include 'intellectual disabilities, uncorrected visual or auditory acuity, other mental or neurological disorders, psychosocial adversity....or inadequate educational instruction' (APA, 2013: 67). Likewise, an IQ below 70 is deemed to disqualify someone from being defined as having a Specific Learning Disorder. This is similar to the WHO ICD-10 exclusionary criteria and notably different to DSM IV. The DSM V definition of 'Specific Learning Disorder' is something that cannot be explained by anything else. Unlike DSM IV, DSM V seems to suggest a single aetiology: stating it 'is a neurodevelopmental disorder with a biological origin that is the basis for abnormalities at the cognitive level that are associated with behavioural signs of the disorder'.

As a 'disorder', it 'disrupts the normal pattern of learning academic skills' (APA 2013: 68). What is meant by the phrase 'the normal pattern of learning academic skills' is open to debate. As Richardson (2015) argues; the DSM IV recognises the 'referral bias' within schools, heavily in favour of boys over girls, but DSM V failed to do the same. DSM IV stresses the importance of difficulties in functioning in 'everyday' situations with reading or spelling. It does not question

how we think about what counts as 'everyday' or even 'academic'. Such 'everyday' activities of literacy are the product of a context, a time, a place, a society with a particular set of beliefs, norms, and a hierarchy with a particular set of self-interests.

In contrast with DSM IV, Serry and Hammond (2015) note that dyslexia no longer has a diagnostic code in DSM V. Furthermore, they noted that while:

dyslexia is included in the descriptive text of *Specific Learning Disorder*, the DSM V working group chose not use dyslexia as a discrete entity and argued that the many and varied available interpretations of the term limit its usefulness.

(Serry and Hammond, 2015: 145, empathises in original)

The DSM V states that:

Specific Learning Disorder occurs across languages, cultures, races, and socioeconomic conditions but may vary in its manifestation according to the nature of the spoken and written symbol systems and culture and educational practices.

(APA 2013: 72).

This attempt to deal with cultural variation seems somewhat similar to Riddick's (2001) social model, which I assess in Part 2 of this thesis. However, DSM IV and V are far less questioning of social attitudes and beliefs than Riddick.

The DSM V assessment criteria, are arguably, more robust than the DSM IV criteria. However, in our ordinary language use this assessment is for dyslexic-like features. Changing the term used and means of assessment may mean something to a Psychologist but dyslexics are not going to change their self-reference because of this change. Furthermore the 'man in the street' (so to speak) will assume (understandably) that this is dyslexia by another name. The shift to a functional definition is significant in arguments concerned with causation, but not in terms of the desire to have a term or definition. Furthermore, one should not lose sight of *who* defines what functioning is; this is a political and social

matter, it is the realm of politicians, and other elite groups. It is also a normative matter; it is determined by social rules. Norwich (2016: 4) when discussing the 'holistic approach to assessment' in that DSM V, notes that 'specific learning disorder' (SLD):

can be specified in three forms, reading, writing, and arithmetic. Each form involves several features or functions, including, for example, word reading accuracy, reading rate or fluency, and so on. To identify SLD, all these areas are assessed, not just specific areas of learning, such as reading accuracy.

DSM V is therefore a more sophisticated assessment framework than the DSM IV from the psychological perspective.

However, DSM V is still based on a normative framework, that is: social norms and rules as to what 'word reading accuracy' or 'reading fluency' is, or, should look like. Functional definitions are inherently normative, though they are not medical, or indeed nomological in nature. If function relies on meeting social norms and rules (normative frames of reference) these may indeed be practical and socially desirable (see for example Winch, 1998). However, my concern is not the practicality of educational assessments, or for that matter, what we do in schools. My principal concern is conceptual clarity, to highlight the role and consequences of such normative practices, assumptions and behaviours that might leads us to define 'reading fluency' (and so on) in certain ways. Consider again the thought experiment; the Dyscomputics do indeed have a difficulty in meeting norms and expectations of their society, but functioning and practical matters of 'fitting in' is only half the story (so to speak). I am concerned with conceptions of education which Other and discriminate. The DSM V, and ICD-10 hinders, rather than assists us, with that conceptual clarity, under the guise of 'functioning'.

Again, as with the WHO's ICD-10, we can point to similarities between a desire to define dyscalculia and equivalent terms for dyslexia. The DSM IV and V have similar necessary and conjointly sufficient conditions for their alternative terms for dyslexia to the WHO's ICD-10. DSM IV and V both base their definitions on the same exclusion criteria: low intelligence, poor teaching and lack of schooling. In other words, both DSM IV and V are seeking to explain why someone who is intelligent and educated fails to meet social expectations of literacy. There is therefore an assumption in both documents that IQ or intelligence should lead, or is directly related to, capacity with literacy. The differences between DSM IV and V are less important, but include variations in diagnosis, exclusion criteria, terminology, questions of cause, prevalence and gender. These differences between DSM IV and V are far less important than the key similarity, the perception of an inexplicable discrepancy between achievement in literacy and intelligence. The APA in both the DSM IV and V have adopted necessary and conjointly sufficient conditions which, like the thought experiment, reveal assumptions of using a normative criteria to then define a 'disorder'. There is confusion here between a difficulty in meeting a social practice (literacy) and a disorder. To sum up both the APA and WHO definitions I provide in the table below.

**Table 5.4 Summary of WHO and APA terms equivalent to dyslexia**

<b>Organisation, document, and date.</b>	<b>Nomenclature</b>	<b>Inclusion criteria</b>	<b>Exclusion criteria</b>
WHO ICD 10 (1994)	Specific Reading disorder (part of specific developmental disorders of speech and language)	Reading accuracy below expected for the child's age and general intelligence.	IQ below 70

APA DSM IV (1994)	Learning Disorders (Including Reading Disorder and Disorder of Written Expression.)	Reading accuracy below expected for the child's age, general intelligence and schooling.	Poor schooling and/ or low IQ
APA DSM V (2013)	Specific Learning Disorder (Includes impairment with reading, written expression and mathematics)	Inaccurate or slow reading, difficulties with spelling, grammar, and so on.	Low IQ, poor schooling or that learning difficulties can be better accounted for by other impairments or disorders.

#### (5.4) Models of dyslexia

Within this section I focus on discussions within the BPS membership of how to define dyslexia, and how this contrast with the definition on the BPS website. Furthermore, as, in the majority of the thesis, I focus on the discrepancy model of dyslexia, it is important to be clear why I do this. I argue it is important to *reconsider* the discrepancy model of dyslexia, *not* because it is widely accepted, but rather because of the conceptual foundations of dyslexia as theory rest on this model. The starting point of dyslexia, as a theory, was to explain the existence of the less literate but intelligent, and it is at this point *the conceptual problems* arose; a point Stanovich (2001) has been at pains to point out. Furthermore, if I am to encourage dyslexics to begin to question dyslexia as a concept, they have to be able to see the conceptual problems (not just empirical problems) with the discrepancy model. In dyslexic folk lore (as it were) it is the discrepancy model that still holds sway, not more recent models found in the academic literature. Empirical studies have since led many psychologists to reject the discrepancy



model and raise subsequent conceptual questions (see for example, Stanovich, 1995, 2001, 2005, Elliot and Gibbs 2008, 2012, Elliot and Grigorenko 2014).

Another model of dyslexia, for example, favoured by Sir Tim Miles and others, was that it functions as a concept as taxonomy or typology of literacy difficulties, and is not a thing at all (see for example Beaton 2004). Dyslexia as a means of classifying literacy difficulties, however, has been heavily critiqued (see for example, Stanovich 2001, 2005). Psychologists have also significantly shifted towards a functional model of literacy difficulties, than perhaps neuroscientists, many of whom argue for a within-brain causation of dyslexia (for a discussion see for example Bowers, 2016a and b, Gabrieli, 2016, and Howard-Jones et al, 2016). However, the social debates and discussion around dyslexia by parents, lobby groups, and dyslexics themselves, has been slower to change. A conceptual critique of the discrepancy model can enable us to see that the origins of the various theories and models of dyslexia is in fact Lexism. By perceiving Lexism, other models and theories of dyslexia can also be critiqued, some more favourably than others. Consider again the Dyscomputics in the thought experiment, how would a typology assist in *that* case? Obviously it would not, likewise with dyslexia, using dyslexia a means of classification is not as helpful as it first appears.

Nevertheless, the concept of dyslexia is still retained by some in the field because the *conceptual* problems with the discrepancy model have not been *fully* exposed. Furthermore, political and social issues surrounding literacy and education (i.e. Lexist discourses) lead us to retain the concept of dyslexia because these issues have not been sufficiently challenged. For example, authors in the dyslexia field reference the work of Elliot and Grigorenko (2014) yet continue to use the term dyslexia, ignoring Elliot and Grigorenko's principal arguments and conclusions (see for example, Tilanus et al 2016; MacCullagh et al 2016).

Likewise debates in *the Psychologist* (the house journal of the BPS) seem to have supporters of dyslexia criticising and dismissing Elliot's arguments (see for example Nicolson, 2005) as well as those who seem to agree, or partially agree with Elliot (see for example Cashdan, 2014). As a matter of comparison for the DSM and WHO ICD-10, I will examine the British Psychological Society (BPS) position on dyslexia, before considering *some* of the different models of dyslexia.

The British Psychological Society (BPS) (2016) provides an A-Z of psychology on their website. In the BPS's entry for dyslexia, dyslexia is described as a 'common condition epitomised by chronic difficulties with reading, writing and spelling'. The BPS (2016: emphasis in original), describe dyslexia as 'inherited (*Developmental Dyslexia*) or caused by damage to the brain (*Acquired Dyslexia*).'

Causation of dyslexia, according to the BPS website at least, is in the brain of the individual, it is acquired or inherited, this is a biological or neurological definition or model of dyslexia. Rather than use the word dyslexic, the BPS uses the phrase 'Individuals with dyslexia'. It is notable that the BPS then has links to the National Health Service (NHS), and British Dyslexia Association (BDA), websites for 'more detailed information.' 'Chronic' usually means over a long period of time, and is normally associated with diseases and disorders. 'Condition', in this instance, one would assume means either: a disorder, or, a way of being, an existence. The words chronic condition, therefore taken together, seems to be suggestive of a disease, an impression reinforced by giving the link given to the NHS website. The language used on the NHS (2016) website would seem to confirm this reading: such as 'diagnosed', 'symptoms of dyslexia', and 'people with dyslexia'. The impression given by the BPS and NHS websites would lead the 'person in the street' (so to speak) to think dyslexia is a thing, a disorder or biological impairment of some kind.

Reason (2001) set out the BPS position on dyslexia in the *Psychologist*, the BPS's journal, having been the chair of the working group that examined dyslexia. She notes that the term 'specific learning difficulties' is favoured by psychologists, however, and dyslexia is not because the term has a 'predominant focus on within-child causative factors has tended to detract attention from instructional circumstances' (Reason, 2001: 298). This position is in stark contrast to the public facing website. Likewise, in a more recent BPS edition of *The Psychology of Education Review*, Elliot (2015a) reiterated his arguments against the usefulness of dyslexia as a concept, and a number of authors responded, which as Elliot (2015b) notes were for the most part in agreement with him (see for example, Brooks 2015, McGeown 2015, Rice 2015, Gibbs 2015). A notable exception was Snowling (2015: 20), who argued for the value of the term: dyslexia:

like all neurodevelopmental disorders....is life-time persistent. This, I would argue why, the construct is not a social one but one which contrary to Elliot's views requires wider recognition.

These responses from BPs members (with the exception of Snowling) therefore are very different from the description of dyslexia on the BPS website. There were two other response to Elliot (2015a) which are important to note.

First, van Daal (2015: 22), presented a more nuanced position, largely agreeing with Elliot, however, he (rightly in my view) disagreed with Elliot, when Elliot and Grigorenko (2014) had claimed 'the question "Does dyslexia exist?" is not a meaningful question.' As van Daal (2015: 22), noted 'If dyslexia is not a very helpful term, it might well not exist at all.' I agree with van Daal on this point, we can talk of reading difficulties, though dyslexia as *concept* exists (for we have a word for it and discuss it) yet as a *thing* it cannot be said to exist if the concept is flawed. A little like the concept of C.S. Lewis's Narnia; one can talk of it, but it does not exist in our everyday sense and use of the word 'exist'. I acknowledge,

however, the existence of dyslexics (or for the sake of clarity, those who refer to themselves, or are referred by others as dyslexic), as distinct from dyslexia. Second, Brackley (2015) did not seem to respond to Elliot (2015a) directly, but rather concerned herself with focusing on teaching interventions, but acknowledged that the value of a diagnosis of dyslexia was limited in developing an appropriate intervention. Brackley (2015: 28 and 30) also used the phrase 'learner with dyslexia', suggesting that she had not adopted Elliot's position fully. Therefore, overall, we might say that the view of BPS members is not reflected by their website.

Those contradictions (the BPS website compared to the response to Elliot) exist, I suggest, because of discourses, political and social, surrounding literacy and education ('Lexism'). I revisit the discrepancy model in later chapters because it enables us to perceive the existence of Lexism (as a social phenomenon) more clearly. The discrepancy model dates back to the original work of Pringle-Morgan, at the end of the nineteenth century, and continued with Critchely in the 1970s (see for example, Miles and Miles, 1999). It was a medical model which sought to explain why intelligent children struggled with literacy tasks. It was finally rejected by many psychologists after it had been critiqued, based on empirical evidence, by Sigel and Hemel (1998). Green (1991: 191), for example, describes developmental dyslexia as the 'commonest language disorder' and is notable because it 'occurs in the absence of gross organic damage', in other words it is not a medical matter.

However, and importantly, a form of the discrepancy model can still be discerned in relatively recent government policy documents. For example, *The Framework for understanding dyslexia* (DfE 2004: 6) suggests that there is a 'paradox' of difficulties with 'elementary skills such as reading and writing'

alongside talents in problem solving, creativity and lateral thinking. The word 'paradox' is only valid if one assumes some link between literacy and intelligence; otherwise there is no 'paradox'. Other conceptual models of dyslexia assume no paradox but still seek to explain the existence of dyslexics. The *Framework* expresses a conception of dyslexia long held by dyslexics, and arguably still held by many dyslexics. To challenge this conception one must first identify Lexism. This has the potential to enable and empower dyslexics to challenge the stigma and prejudice around this issue, and at the same time remove the need for the flawed concept of dyslexia. In short, I seek to encourage dyslexics to reject the label 'dyslexia'.

## **Conclusion**

Within this chapter I have argued in a thought experiment (the 'Dyscomputics') that how we seek to define dyslexia or literacy difficulties arises from social beliefs and educational priorities. Furthermore, that the desire to create a definition is itself a feature of Lexism. In the second and third sections I outlined how the WHO and APA use necessary and conjointly sufficient conditions to establish the meaning of 'disorders' equivalent to dyslexia. In the fourth section I consider discussions within the BPS membership on definitions of dyslexia with other past and present models of dyslexia. I contrast the definitions with features of my own concept of Lexism, as set out in the thought experiment. The practical value of literacy, that it is a common social practice popularly associated or confused with intelligence, does not mean that a difficulty with literacy equates to a disorder. The assumption that it does should be treated with extreme caution. Dyslexics exist, in the same way that 'Dyscomputics' exist in the alternative society in the thought experiment, because of beliefs, expectations and discriminatory

practices, not because of a disorder or impairment, or a 'difficulty' - whatever that might mean.

## **Part 1: Summary**

In each of the chapters of Part 1, I provided different aspects of the conceptual foundations for Lexism. I began by clarifying the difference between concepts and conceptions, and what I mean by normative literacy. I then outlined the similarities between Lexism and other social phenomena. I argued that Lexism is not a form of ableism or disablism, but something distinct and separate. I rejected the conception of dyslexia as being something 'in the brain'. I pointed out the problem of seeking to define dyslexia, and even the problem of seeking to use definitions to establish understanding. I also outlined my philosophical approach and methods including thought experiments and the employment of objects of comparison. Within Part 1, I emphasised my arguments with the thought experiments: 'evil genius', 'an alternative present' and the 'Dyscomputics'.

## **Part 2: The Social Model**

In Part 2 of this thesis I critique Riddick's social model of dyslexia, currently perhaps the strongest model by which to conceptualise the social identity of dyslexics. I conclude by rejecting the social model, and in doing so I begin to develop arguments in favour of Lexism. In Chapter 6, I identify three key aspects of Riddick's model: (i) discrimination and Othering of dyslexics; (ii) historical and social (non-historical) factors which impact on the 'disability'; (iii) dyslexia as a form of 'impairment' which is not socially constructed. In Chapter 7, I focus on the Othering and discrimination of dyslexics, the first aspect of the social model of dyslexia, and argue that this is the principal strength of the model. In Chapter 8, I focus on the second aspect of the social model - namely how social and historical factors impact on the disability associated with dyslexia. I argue that what defines someone as meeting a norm of literacy or failing to do so, depends on the norms of the place and time in which they were born. In Chapter 9, I focus on dyslexia as impairment, the third aspect of the social model of dyslexia. I argue that there are two alternative possible foundations: based on biology, or, on function, both of which can be rejected. In Chapter 10, I engage in a further critique of Riddick's model, drawing on the work of Ryle (1949).



## **Chapter 6 Riddick's Social Model of Dyslexia**

### **Introduction**

The focus of this chapter is to provide a foundation for a critique of Riddick's (2001) social model of dyslexia, and I develop this critique further in later chapters. I identify three key aspects which distinguish Riddick's model. First, Riddick argues for the discrimination and Othering of dyslexics; second, she suggests that the existence of 'cultural' factors impact on the 'disability' as socially constructed. Third, Riddick suggests that dyslexia is a form of 'impairment' which is not socially constructed. Each of Riddick's three aspects I deal with in turn and in detail in chapters 7 to 9. Riddick's model is a strong one and the potential weaknesses have a number of possible defences, which I need to consider and examine in turn. In the first section I highlight and define the three key aspects, drawing on Riddick's text. In the second section I problematize Riddick's model and her use of 'impairment'. In the third, fourth and fifth sections I focus on each of the three aspects of Riddick's social model in turn.

Riddick's model remains significant and important because she seeks to draw our attention to those aspects of the dyslexia debate which relate to normative matters, as opposed to the nomological. Though she does not use this nomenclature, she makes an important distinction between prejudice, discrimination, the socio-historical context (normative matters), and a neuro-scientific impairment (a nomological matter). This is an important distinction to make as some still fail to make such a distinction. For example, some neuro-scientists focus on the impairment of dyslexia; they acknowledge the social consequences of being dyslexic but fail to recognise the normative aspects of a literate society (see for examples Im et al 2016, Ozernov-Palchik and Gaab 2016a,

2016b). Riddick's ideas, therefore, are still important for the consideration of the social context of dyslexics. Where I would differ from her is that I would reject any concept of a neuro-scientific impairment; the identification of someone as dyslexic is not a nomological matter, it is a normative one.

### **(3.1) The Three Aspects**

In this first section of the chapter I give a brief overview of Riddick's model drawing on Riddick's (2001) text. The social model of dyslexia has several strong features. It enables us to question power relationships and where social and cultural aspects impact on, or discriminate against, dyslexics. Its significant weakness as a model is that it still presumes some form of 'impairment', a disorder or pathology called dyslexia or any other equivalent term. I examine Riddick's belief that dyslexia is a form of 'impairment' which is not socially constructed and is distinct from the socially constructed 'disability'.

The first aspect of Riddick's model is the 'social oppression' and 'prejudice' faced by the dyslexic minority. However, 'social oppression' and 'prejudice' are emotive terms, instead I use terms I consider more cautious: Othering and discrimination. Othering can occur without prejudice and likewise discrimination is not necessarily conscious oppression. 'Othering' I use here as shorthand for a number of societal attitudes and practices that Riddick alludes to. Riddick (2001: 225 and 229) argues that dyslexics experience 'prejudice' and 'contempt' which 'gives some' dyslexic children 'the message that they are unworthy or even "bad"'. She notes that informal labels for dyslexic children within the school system include 'thick', 'stupid', 'lazy' or 'careless' (2001: 231). Therefore the role of a formal label of dyslexia is to mediate or challenge this 'informal labelling process' (Riddick 2001: 231). Directly related, but not exactly the same, is what Riddick

(2001: 226) terms 'social oppression', a phrase drawn from the social model of disability. Riddick (2001: 232) draws on her own research from interviewing dyslexic teachers; she emphasises that it is important from a 'disability rights perspective' that dyslexics are not barred 'from educational and vocational opportunities that they are otherwise qualified for'.

The second aspect of Riddick's social model is that cultural factors influence the manifestation of the 'disability' as distinction from the 'impairment' of dyslexia. For the sake of my analysis in later chapters (especial Chapter 8) I make a distinct within this aspect between historical and non-historical (or social) factors. Riddick (2001: 223) says 'how cultural factors....can transform the impairments that some children have into disabilities.' Historical factors, I suggest, are those which originate in the past but still influence what constitutes the disability of being dyslexic today. Non-historical (or societal) factors are those things within the present that influence what constitutes the disability of being dyslexic. Examples of historical factors in Riddick's (2001) model would be when she highlights how English has Germanic roots but was written down using Latin letters. She also notes that in 'Shakespeare's time spelling was more flexible, with alternative spellings of the same word tolerated' (Riddick, 2001: 227). The change in spelling practices to become more rigid still influences attitudes now, and as such, can be classed as an historical factor. Likewise, the irregular and non-phonetic nature of English, which Riddick notes as important, is historical in origin. Linguistic features, such as irregular or regular forms of languages, are part of current social factors, and as such I classify them as non-historical. For example, Riddick (2001) notes the example of German and English dyslexic children, with English children struggling more with their native language in its written form. Contemporary politics is a social (or non-historical) factor; Riddick (2001: 234) quotes a dyslexic teacher

who comments on language and spelling being 'very political....very elitist.... and it's about power'. Riddick's point is to emphasise the importance of political elites, these are also part of what I term non-historical factors.

The third aspect of Riddick's model is that dyslexia the impairment is distinct from dyslexia the disability. Riddick (2001) argues that the extent to which the impairment of dyslexia will result in a disability will depend on culturally constructed norms of literacy. Drawing on Oliver (1986), Riddick (2001: 226) notes that those who propose the social model of disability suggest that impairment is:

any physical difference or defect and the disability is the consequent reaction placed on them by the way that society is organised. This raises important issues for dyslexia. Under this conceptualisation a phonological impairment could lead to disability because of society and particular school's attitudes to literacy.

Dyslexia, according to Riddick (2001, *passim*), is an 'underlying impairment' or impairments plural, she does not categorically say which. Her definition of dyslexia as impairment is that it is 'phonological' in nature and is separate from 'cultural' norms or societal and educational attitudes to literacy. There is a problem with this position if one defines impairment and disability in this way; it is unclear exactly how one distinguishes between who is, and who is not, dyslexic. Where does one draw a line between dyslexia as 'impairment' that does not lead to a 'disability' and dyslexia as impairment that is also a disability, bearing in mind the wide variation of what constitutes the 'impairment', or numerous factors that might lead to a 'disability' becoming manifest.

### **(3.2) Riddick's definitions of 'impairment' and 'disability'**

It is unclear in Riddick's account when she refers to dyslexia as impairment whether she means a disease or pathology, or a simple biological difference. It is also unclear exactly how an impairment and disability relate to one another.

Riddick is vague as to how she would define dyslexia, it is unclear whether she means that dyslexia is *both* impairment and disability. Riddick adopts Oliver's (1986) definition of a social model of disability who defines 'disability' as socially constructed and a form of prejudice and oppression. 'Impairments' in Oliver's model is the medically defined disease or pathology. It is unclear whether Riddick considers dyslexia to be both an impairment and a disability, or just an impairment. In this section I put forward my own position as to how we might use terms like impairment and disability, and how these are distinct from disorder, disease or pathology. As I argued in Chapter 1, I would suggest that one cannot be impaired in reading and spelling; one can only be good or bad at those tasks, and be judged as such. In this section I develop my arguments further.

Riddick bases her definition of dyslexia on Frith's (1999) three layered explanatory model. Frith's (1999) argument is there is a biological level (which is genetic in origin), a cognitive level (specific processing deficits) and a behavioural level (poor reading and writing). Riddick notes that Frith (1999) acknowledges the significant differences in those different explanatory levels, and that the environment of the child has a vital role. Medical or clinical models of dyslexia, Riddick (2001: 223) acknowledges, focus on the 'underlying cognitive impairment'. It is unclear, however, what Riddick thinks dyslexia is: is it 'processing deficits' i.e. a disorder in the brain or is it socially constructed from the social attitudes to literacy in combination with a genuine difficulty with literacy. Implied in Riddick's acceptance of Frith (1999), dyslexia is of biological origin, the characteristics of which interact with the child's environment. Yet Riddick's use of the term impairment is a little curious, it leaves us none the wiser as to what she considers dyslexia to actually be; is dyslexia a disorder or pathology, or merely a difference which results in a socially constructed disability.

To clarify how we might think about impairment and disability I define how I understand the terms based on our ordinary language use, rather than any technical meaning. My position, regardless of Riddick's definition is that impairment and disability are not so easily separated. Riddick (2001) bases her definition on Oliver's (1986) definition of the social model of disability. I am not adopting a medical model of disability, neither am I adopting the social model. I adopt a position that relies on the specifics of the case, rather than a particular definition. I am unconvinced that within our ordinary language use we can separate impairment and disability as easily as either Oliver or Riddick would suggest. We can separate the use of words like 'disease' and 'pathology' from how we might use impairment and disability. Impairment does not necessarily indicate an origin in pathology or disease; it can be how a person interacts with the environment they are in. Furthermore, 'impairment' cannot be easily separate from a task or intended task or project which someone is seeking to carry out. Therefore, for the sake of clarity it is important to be able to distinguish between impairments, disability, disorders and pathologies. This clarity is on occasion lacking in Riddick's account.

Disorders and pathologies are medical phenomenon that we can observe, measure and so on. Impairment in contrast is being limited in doing something in a given context. For example imagine you enter a vast room with thousands of people, every tenth person, however, is limping. The intended task is walking, the limp is indicative of the impairment, the person's difficulty in walking. Why each person limps might be individual to them: they stubbed their toe that morning, sprained their ankle the day before, they have arthritis, or they are an amputee with a prosthetic leg. Arthritis, for example is a disease, spraining ones ankle is a minor injury; *neither* is the *impairment* of limping. In Riddick's account it is unclear

whether she is saying dyslexia is like arthritis (a disease or disorder) or like a limp (the ordinary language use of the word 'impaired' or 'impairment') or indeed just a biological difference. It is possible in some contexts that a biological difference (such as someone's height) can result in them being impaired yet it would not be a disorder or a disease.

As an example, let us consider a basketball player and a jockey. A basketball player who wishes to change careers to become a jockey, and a jockey who likewise wishes to become a basketball player would both be impaired in doing so. Neither would have a *disease* or *pathology* that prevents them from being successful in their new careers, yet it would remain highly unlikely that they would succeed in their career change. A jockey in their own home may find getting something from a high shelf without the aid of a stool difficult, yet for a basketball player this would not be problematic. The jockey might be impaired in doing *this* task but if the jockey ensures that all their selves are within reach then they would cease to be impaired. Likewise a basketball player living in an old house with a low ceiling, may find himself forced to stoop, he would be impaired by the level of the ceiling. In the cases of the jockey and the basketball player we might point to their biology, the context and the task they wish to fulfil all being interrelated to define the impairment. Within our ordinary language use we could not point to a specific feature and say 'that thing in their biology *there* is the impairment!' Such a statement would make no sense. Neither can we, within our ordinary language use point, to the jockey or basketball player having a disorder or disease.

Integral to this meaning of impairment in our ordinary language use is a particular context, including something that someone is trying to do and the circumstances within which they are trying to do it. In the case of dyslexia the

impairment regards the project of reading, spelling and so on. We could indeed point to the biology of individuals being an *aspect* of the impairment (like the height of basketball players and jockeys) but we could not do so separate from the intended action and the context in which it is done. In contrast one might point to a disease separate from the task attempted, for example, someone with lung cancer who wishes to run a marathon and is impaired from doing so. Yet the same person would not be impaired in writing a shopping list. In this case we can point to lung cancer as the disease or pathology; in the case of the jockey and basketball player, however, one cannot point to a disease. Impairment is not separate from the project undertaken, i.e. you are impaired whilst attempting to do something. Contrary to Riddick, you cannot be just 'impaired' by dyslexia *separate* from doing literacy based tasks. If dyslexia exists and is a disorder (and this is a big 'if') one could still point to the disorder and then point to the impairment separately (like a sprained ankle and a limp). Having problematized Riddick's use of the term 'impairment' I will now examine each aspect in turn.

### **(3.3) Aspect 1, Othering and discrimination**

The first aspect of Riddick's model I term the discrimination and Othering of dyslexics. I first examine Riddick's own text for her interpretation of the Othering and discrimination of dyslexics. I argue that this is a strength of Riddick's model and one which is similar to Lexism. I examine how she highlights examples of discrimination and how this links to educational policy. Again, I argue that this is a strength of her model. I suggest that although Riddick's arguments for the Othering and discrimination of dyslexics are convincing, she does not go far enough. The concept of dyslexia is itself a form of Othering because what counts as the normative standard of literacy that must be met is specific to the social,



historical and cultural context. Furthermore, I would argue that discrimination within the education system is inevitable if one becomes fixated with raising literacy acquisition. Although Riddick rightly identifies the importance of Othering, she fails to fully acknowledge the consequences for the concept of dyslexia.

The Othering of dyslexics is of primary importance. Riddick (2001: 228) highlights that 'a major issue for all people with impairments is the attitudes and particular prejudices of the dominant society. In the case of....dyslexia....these attitudes focus primarily on their literacy skills'. Focusing on the historical example of W.B Yeats, who had poor spelling, Riddick (citing West 1991) makes a strong argument; the historicity of these claims I will set to one side. Reflecting on the case of Yeats, Riddick (2001: 229) argues that there is a:

degree of scorn and outrage expressed towards someone who cannot spell. This seems particularly strong where someone is perceived to be an academic or thinker of some note. The implicit assumption underlying this appears to be that scholarship or deep thought is incompatible with poor spelling. The person is therefore either bogus or arrogant and lazy in flouting the rules of spelling.

This is a particularly insightful conclusion, and Riddick uses quotations from contemporary dyslexic undergraduates to underline this argument, which is drawn from her earlier research (Riddick 1997). I argue at length in Chapter 10 that this belief arises from conceptual confusion; mistaking propositional knowledge (which is at least a feature of spelling) as the foundation of intellectual capability. Ryle (1949) terms this conceptual confusion the 'intellectualist doctrine'.

Discrimination within the education system and education policy is fundamental to Riddick's social model. Riddick emphasises the role of policy, such as the Warnock report (1978) and the *Excellence for all children* (1997) Green paper. She suggests that if 10 per cent of children are dyslexic then in 'a spirit of

inclusion.... we need to consider a social model which challenges some of our beliefs and assumptions about literacy' (Riddick 2001: 224). This is a reasonable argument. Riddick also provides an example from policy agenda, the Higher Education Quality Control's (1996) concept of 'graduateness'. She notes its emphasis on spelling and grammar. Riddick also notes the attempts to bar dyslexics both openly and covertly from teacher training programmes. This arose, she argues, from:

the government's stringent literacy and numeracy standards for trainee teachers in all subject areas. Teacher training departments like schools seemed caught between the opposing forces for inclusion and higher academic standards.

(Riddick, 2001: 232)

This last point is important because 'higher academic standards' can very easily become confused in policy agenda with higher literacy standards. An obvious point at this juncture is that dyslexics can contribute to teaching subjects other than literacy, such as mathematics, science or art.

### **(3.4) Aspect 2, Historical and non-historical factors**

The second aspect of Riddick's model is 'cultural factors' which lead to the 'impairment' of dyslexia becoming a disability. I separate 'cultural factors' into non-historical and historical factors. One could define 'cultural factors' in a multitude of ways, including linguistics, politics, traditions, education, and folk psychology. For the purposes of my analysis, historical and non-historical (or social) features are the key areas of 'culture' which are significant. Folk psychology, politics, and education will be subsumed in either 'historical' or 'non-historical' (social) factors. Historical factors include differences in what constitutes literacy in different periods across the same linguistic or geographical group, in this case the English and England. Social or non-historical factors include social elites' self-interests or

beliefs which lie behind education policy agenda. This aspect, again, appears to be a strength within Riddick's model, but I argue that this raises the 'temporal problem' that defining dyslexia as having a biological origin ignores the historical factors which influences what constitutes literacy in a different period. I examine this in detail in Chapter 8.

I term social or cultural factors of Riddick's model, other than historical factors, 'non-historical' factors. Those non-historical factors might include: political agendas; the influence of political; economic and professional elites; linguistic features of different languages, and what constitutes literacy in a given social context. Social norms and attitudes towards literacy are key features in Riddick's model. Likewise, linguistic differences across different languages can also affect to the extent to which dyslexia is a difficulty. Riddick (2001: 224) notes that in some languages literacy is easier to acquire than in others, as she argues: from 'a social perspective making English as phonologically transparent as Italian would significantly decrease the difficulties that English speaking dyslexics encounter.' Other elements within the social factors are the attitudes within schools towards literacy and how they balance the demands for 'high literacy standards' alongside those for 'inclusion'. Riddick sees her model as a way to raise literacy standards, although she also stresses that we should question such norms. I argue that to fully question norms of literacy we cannot assume what 'higher standards of literacy' are. The rhetoric of higher literacy standards is a product of social factors which need to be questioned further.

Historical factors within the social model of dyslexia, although not always of immediate importance, are subtle influences that impact on the other aspects within Riddick's model. Riddick (2001: 224) notes that:

the impairments underlying dyslexia have only become a major difficulty because of the move towards mass literacy and the consequent negative connotations attached to being 'illiterate'. Because mass literacy was attendant on mass schooling the notions of being 'educated' have become inextricably bound together in many European cultures.

This argument is a fair one. Historical developments such as mass literacy and mass schooling lead those with difficulties with literacy to become more obvious; and as such more likely to be diagnosed as dyslexic. The Othering of dyslexics arises from beliefs and attitudes within our 'cultural' frames of reference. Riddick (2001) notes the difference in English as a language over time; sixteenth century English was more phonetic than contemporary English. As I discuss in Chapter 8, changes in English spelling became more 'fixed' by the later part of the eighteenth century. Furthermore, during the latter part of the nineteenth century and early twentieth century, intellectuals purposely wrote increasingly complex prose to assert their erudition over a more literate population (Carey, 1992). The influence of historical developments is therefore important, if literacy is asserted as an historical norm.

As I argue elsewhere (Collinson, 2014), there is a 'temporal problem' in the definition of dyslexia. This is a significant difference between how Riddick and I would interpret dyslexia. Riddick would argue for cultural factors separate from the 'impairment' (whatever that means). In contrast, I argue that as historical norms of literacy are not constant, neither are the levels of literacy of those who match or fail to meet such norms. The temporal problem of dyslexia suggests that the dividing line between those who are, and those who are not, said to be failing to meet the norms of literacy do not form a stable or constant group. In other words there is no biological 'underlying impairment' as such which is, or could ever be, historically or culturally constant. The very same 'cultural factors' that Riddick herself highlights would seem to support this argument. A basic principal of

scientific research is that in experiments one can control the variables. If the key variable, literacy, is not constant over time, then one cannot really assert it as an historical norm. One might have social norms in different times and places, but there is not a single universal 'norm' of literacy. This makes the concept of an 'underlying impairment', that is somehow separate from historical and social factors, problematic.

### **(3.5) Aspects 3, dyslexia as impairment**

The third and final aspect of Riddick's model is dyslexia as 'impairment' separate from cultural factors. I argue that this is the weakness in Riddick's model; it is unclear what Riddick means by 'impairment'. Her use of the term 'impairment' seems to separate the 'impairment' from the task attempted (literacy). For example, Riddick (2001: 224, my emphasis added) notes that 'the degree to which the *underlying impairments* of dyslexia becomes a disability will depend on the prevailing cultural norms for literacy'. One could not say that someone has a limp unless they are attempting to walk or are required to walk. If the concept of an 'impairment' is based on a biological origin this would suggest Riddick is actually referring to something like a sprained ankle or arthritis i.e. a disease, injury or disorder. An added problem here is that walking and reading are not comparable. As Ho (2004) argues 'inclusionary' or 'exclusionary' criteria, such as norms of literacy, can be based on erroneous assumed norms that children learn the same things at approximately the same pace. The 'erroneous assumed norms' can create an 'erroneous' concept of an abnormality, a disorder or in Riddick's wording an 'impairment'.

Riddick, however, has a defence that should be borne in mind. To gain assistance, a dyslexic has to acknowledge some form of disorder or 'impairment'.

Riddick (2001: 226) argues that: a 'particular dilemma for not evident disabilities is that individuals often have to fight hard to have them recognised before they are in a position to challenge the society that has helped to produce them'. Riddick (2001: 232), furthermore, argues that:

From a social model of disability perspective it appears that it has to be demonstrated that individuals with dyslexia have a legitimate impairment before it is possible to consider how cultural practices and norms have added to the degree of disability.

This highlights a very real dilemma; dyslexics, to gain an acknowledgement of their difficulties, have to first gain acknowledgement of their 'impairment'. It is also very difficult to challenge those socially constructed norms of literacy. Political practicality is not a defence; the question is what *dyslexia is*.

Riddick (2001: 226) asks a series of important rhetorical questions, the expected answer to which would be 'no'.

Should we expect all children with dyslexia to become perfect spellers?

Should we expect all children with dyslexia to become fluent and accurate at reading aloud?

Should we expect all children with dyslexia to have legible hand writing?

In posing the questions in this way Riddick seems to reveal that she accepts norms of literacy that lead us to look for a cause, *any cause*, to explain why a child might not be able to do these tasks. If she wishes to challenge norms of literacy to the fullest extent why not ask why *any* child, not just a dyslexic child, would be expected to reach age related norms associated with these tasks? *A need for a definition of dyslexia* arises from an assumption that children should be expected to fulfil these tasks. The *need* itself arises from Lexism, our normative expectations of literacy.

As I argued in Chapter 5, the need for a definition of dyslexia (or any equivalent concept of difficulties with literacy) arises if we become entrapped in normative misconceptions. In the case of the Dyscomputics the normative expectation was one based on a capacity with computers, with dyslexics the normative criteria are based on literacy. As I argued in Chapter 4, we are led astray by the tendency to locate the human actions of reading and writing in the brain of an individual. However, it is *human beings* in particular contexts, for particular purposes that read, write and think. As Riddick (2001) points out, cultural context, how we value, assess and judge literacy is significant. If someone is impaired in literacy, they are impaired in meeting the arbitrary thresholds established by the criteria of normative literacy. This is established in social context, not in someone's brain. In the chapters that follow, I critique Riddick's model further by pointing out the role of social context in determining who is, or is not, defined as dyslexic.

## **Conclusion**

Within this chapter I focused on the three aspects of Riddick's model. In the first section I explained and set out all three aspects in brief. I explained what the three aspects are, and I highlighted where and why my terminology differs to that of Riddick. In the second section I problematized Riddick's use of the term impaired. In the third section I focused on Othering and discrimination as the first aspect of Riddick's model and argued that this feature is in common with Lexism. In the fourth section I explained the importance of social and historical factors; I argued for the importance of the temporal problem in defining dyslexia. Finally, in the fifth section I emphasised Riddick's belief in dyslexia the impairment, separate from the first and second aspects. I argued that the concept of 'impairment' is the

principal difference between Riddick's view and my own. Contrary to Riddick, I argued that the concept of dyslexia is itself a form of Othering. The purpose of this chapter was to highlight the three key aspects of Riddick's model to provide foci for later chapters. The first aspect I address in detail in Chapter 7, the second aspect in Chapter 8, and the third aspect in Chapter 9.



## **Chapter 7 The strength of the social model: Discrimination, Othering and Policy**

### **Introduction**

In this chapter I focus on the first aspect of the social model of dyslexia the Othering and discrimination of dyslexics. I argue that this is the principal strength of the social model and a feature that it has in common with Lexism. However, I go further than Riddick, and suggest that higher demands for literacy lead to the social construction of 'dyslexia' as a problem. I argue that we need to consider educational policy, attitudes towards literacy and the culture within the Education system. I draw upon theoretical insights from Policy Archaeology and New Literacy Studies; such approaches to policy and literacy provide a different way of seeing norms of literacy as fluid social constructs. My argument is that alternative ways of viewing norms of literacy enable us to understand the nature of dyslexia and what it is to be dyslexic.

The Othering and discrimination of dyslexics which I examine in this chapter are the examples of normativity (in the sociological sense). This Othering and discrimination is the consequence of a failure to meet social expectations – which exist as forms of rule following, which are normative in the sense that Winch (1998) uses the term. The enforcement of normative expectations of literacy is enacted within the education system, through government policy and practices within schools. I am not claiming that dyslexics such as myself do not have genuine difficulties with literacy and memory, we clearly do. However, such difficulties do not justify discrimination, Othering and prejudice. Indeed, part of the problem is that those reactions on occasion include beliefs about literacy, ability and intelligence which presume a nomological relationship between those issues.

For example, White Papers on Education (DfES, 2009, 2010) frequently appear to treat literacy and academic ability as synonymous. Yet these are normative matters, in the sociological sense and as used by Winch (1998).

The structure of this chapter is as follows. In the first section, I put forward a brief thought experiment, 'The Twins', to problematize the idea that there is a clear distinction between a disability (as a form of Othering) and impairment (as a form of dysfunction). In the second section, I focus on the sociology of dyslexia. The social model of dyslexia recognises the discrimination and Othering of dyslexics; I place the discussion of the first aspect in the context of this relevant wider literature. In the third section, I relate the first aspect of the social model to Policy Archaeology. Policy Archaeology enables us to analyse further the Othering and discrimination of dyslexics within Education policy. I argue that Walton's (2010) concept of a 'Policy trap' is particularly useful both to the social model of dyslexia and Lexism. I draw parallels between a 'policy trap' and the work of Campbell (2011, 2013) with regard to long term policy trends in Education and literacy, and dyslexia. In the fourth section, I highlight how the first aspect of the social model and Policy Archaeology relates to, and is complemented by, New Literacy Studies' approach to literacy. New Literacy Studies emphasises literacy as a social practice in given contexts; literacy is not an ahistorical technical tool which exists outside the social or political context. Finally, I reconsider the thought experiment in the light of the theoretical insights provided by Policy Archaeology and New Literacy Studies.

### **(7.1) Thought experiment: The Twins**

Consider the following thought experiment: imagine that there are two sets of identical twins, the first pair are dyslexics (A and B); the second pair are not

dyslexics (C and D). Let us imagine, for the sake of the thought experiment, that A and C are brought up in a literate culture, but B and D are brought up in a non-literate culture. Under Riddick's model, A is 'disabled' by the social norms of the literate culture that he lives in; B, brought up in a non-literate culture is not 'disabled'. However, both A and B 'have' the *'impairment'* dyslexia. According to Riddick's model twins C and D are *neither* impaired nor disabled. Her model can be expressed in a matrix as set out below. In Riddick's model, only the twin who is both impaired and in a literate culture would be disabled by dyslexia.

**Table 7.1**

<b>Twin</b>	<b>Are impaired by dyslexia</b>	<b>Culture</b>	<b>Disabled</b>
A	Yes	Literate	Yes
B	Yes	Non-literate	No
C	No	Literate	No
D	No	Non-literate	No

Now, however, let us problematize Riddick's model as expressed in this matrix. For the sake of argument let us assume that the non-dyslexic twin, C, was actually born into a different culture, time or place with significantly higher literate expectations than our own. In this variation C, for the sake of this thought experiment, fails to reach that social norm. In the first matrix (above) twin C was neither disabled nor impaired; in this new culture twin C is now disabled because this culture actively disables them. The problem now is, is twin C impaired, and this is expressed with a question mark in the below matrix.

**Table 7.2**

<b>Culture</b>	<b>Twin C, Disabled</b>	<b>Twin C, Impaired</b>
Old culture	No	No
New culture	Yes	?

If Riddick's model is correct (as expressed in the first matrix), C may become 'disabled' by those social norms; but he is somehow not *impaired* by dyslexia. Contrary to Riddick's view, C now has a biology which impairs his ability to meet norms of literacy (as expressed in the second matrix). If this is the case we cannot easily discern a difference between 'dyslexia' as disability and dyslexia as impairment. I reconsider this thought experiment at the end of this chapter.

## **(7.2) The sociology of dyslexia**

In this section I focus on the sociology of dyslexia and how dyslexics are frequently alienated from education and society. The evidence can be read as supporting both the social model of dyslexia *and* Lexism. I emphasise the strength of the social model and argue that Riddick's model recognises the importance of the discrimination and Othering of dyslexics. For example, Riddick (2001, 2003), herself, provides accounts of dyslexics who are also teachers; she notes how dyslexic teachers often conceal their own dyslexia, having experienced prejudice from non-dyslexic colleagues in the past. MacDonald (2009a and b, 2010a and b, 2012) is perhaps the most significant author in this area who builds on Riddick's work. MacDonald emphasises that he is seeking to address the social consequences of the 'disability' of dyslexia, in the sense of the social model of disability. I give a brief overview of indicative literature on the sociology of dyslexia before MacDonald in which I focus principally on the UK school system. I begin by examining the influence of Riddick's model on MacDonald.

MacDonald (2009a and b, 2010a and b, 2012) builds on the work of Riddick (2001), however, his model remains similar to Riddick's. It is important to consider to what extent McDonald separates those factors which disable dyslexics further from the concept of impairment. He (2009a: 348) explains that:

In developing a social model of dyslexia this study has attempted to draw similarities between physical disabilities and dyslexia. To achieve this....this article will explore dyslexia by analysing the unheard voices of people diagnosed with this condition.

Like Riddick, MacDonald makes a distinction between disabling factors and an impairment; although, if anything, he goes further when he uses the phrase 'people diagnosed with this condition'. However, MacDonald (2009a: 349) also notes that the social model 'implies that there is a deliberate shift of attention from "functional limitations" to "problems caused by a disabling environment."' MacDonald (2010b), summing up his own work of 2009, argues that he accepts a biological explanation for why dyslexics exist, but highlights the importance of a social interpretation and the role organisations have in discrimination and exclusion. Riddick's model, therefore, has a clear impact on MacDonald's work.<sup>9</sup>

Several authors before MacDonald evidence the social experiences of dyslexics. I use a few indicative examples from a UK context. Burden (2005) focuses on the attitudes of dyslexic boys who had transferred to a specialist school. He emphasises the unnecessary alienation from the education system that arises from prejudice and further argues that in his sample of dyslexic school boys, 'by the age of transfer to secondary school they were already identifying themselves as academic "losers" who were at risk of carrying that self-inflicted label with them throughout the rest of their lives' (Burden, 2005: 78). This has a

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<sup>9</sup> MacDonald in conversation and correspondence, accepts Lexism as an alternative by which to define dyslexics.

number of consequences. Kirk and Reid (2001) and Svenson et al (2001) demonstrate the high numbers of dyslexics amongst young offenders though the exact numbers may be open to debate because arguments can arise about definitions of dyslexia as well as testing methodology. Taylor and Walter (2003) discuss the limitation of choice of occupations for dyslexic adults. Wolf and Lundberg (2002) discuss the high prevalence of dyslexic Art students, perhaps due to their exclusion from other subjects and disciplines. McKay and Neal (2009) highlight the educational disengagement of those with 'hidden disabilities', including dyslexics, as unlikely to return to education and more likely to become young offenders. This literature is the context for MacDonald's work.

MacDonald (2009a and b, 2010, 2012) demonstrates, in small case-studies, how dyslexics are alienated from education and can become drawn into crime and disorder. His detailed work fits within wider empirical work (as above) on dyslexics who become socially alienated. MacDonald's (2009a) work also examines both the educational and employment barriers dyslexics face, and provides detailed analysis and excerpts from interviews with dyslexics which underline and highlight the social issues I discuss in this section. MacDonald's work confirms and develops the earlier studies on the consequences of educational disengagement. Social alienation, which begins with alienation from the compulsory education system, has other consequences in terms of limited life choices and employment. Even those dyslexics who do reach university still face discrimination.

Several studies suggest dyslexic undergraduates often face discrimination when they reach universities in the UK, US, and Australia (see, for example, Ferri et al, 1997, Madriaga, 2007, and Ryan, 2007). Evans (2013, 2014) highlights the prejudices experienced by student nurses by both work place mentors and nursing lecturers. Dyslexics' failure in education can be a self-fulfilling prophecy, for

example Stack-Cutler et al (2015) emphasise the importance of emotional support for dyslexic university students, without which success is even harder to achieve. This is not helped by the experiences of dyslexics whilst at school. Elliot and Wilson (2008) note those dyslexic pupils often have to overcome the prejudices of their teachers. Elliot and Wilson (2008: 12) noted that a local survey in Cambridgeshire and Peterborough 'suggested that staff in some secondary schools can have quite negative attitudes about disabled learners succeeding in HE.' Elliot and Wilson (2008: 12) suggest this view is 'in particular, about young people with specific learning differences' (i.e. dyslexia). Riddick's model would class this as 'social oppression', I would term it Lexism.

MacDonald's work, and that of other authors, provides strong evidence to suggest that the first aspect of Riddick's model is convincing. I use one quotation from one dyslexic adult looking back at his childhood to underline this point. Noel Ruane, founder of the Freemont Group (Sunday Times 6<sup>th</sup> July, 2008), put it very eloquently when he says: 'On the last day, I remember the teachers lining up at the school gates to see me leave and wishing me happy dole queuing. It still upsets me to think about those days'. This quotation personalises the evidence reviewed in this section. Riddick (2001) might define the reaction of Ruane's teachers as 'social oppression' of an 'impaired' group. Alternatively, I suggest that the attitudes of Ruane's teachers are a result of conceptual confusions that reinforce and promote a normative view of literacy (Lexism) which led to his teachers associating difficulty with literacy with a lack of intelligence. Policy Archaeology and New Literacy Studies enable us, to problematize this Othering and discrimination further.

### **(7.3) Policy Archaeology**

In this section, I focus on Policy Archaeology in terms of the theoretical insights it provides for the Othering and discrimination of groups within Education policy. As I use philosophy as my methodological approach I am not adopting Policy Archaeology as a methodology. I briefly explain the value of Policy Archaeology, and then focus on what Walton (2010) calls the 'policy trap'. I emphasise the importance of the work of Campbell (2011, 2013) on the early development of policy with regard to literacy and early definitions of dyslexia. I argue that, although Campbell does not make this connexion, he is, *de facto*, describing a 'policy trap'. Walton's (2010) concept of a 'policy trap' is evident in the work of Campbell (2011, 2013) in terms of long-term policy trends in Education which created, I argue, 'dyslexia' as the problem. This provides a different way of seeing dyslexia, and enables us to begin to discern features of Lexism

Sheurich (1994) argues for a new and more critical approach to policy than previous work done in the area of Policy Studies. Sheurich follows Foucault in analysing policy as part of the social construction of social problems. Sheurich (1994: 297) says he does not wish 'to be held in thrall' by Foucault's work. Sheurich therefore is influenced by Foucault but does not slavishly follow a Foucault inspired narrative. Sheurich (1994: 300) suggests that an important area of Policy Archaeology, distinct from Policy studies, is that: 'instead of accepting a social problem as an empirical given, [it] questions or brackets this givenness'. Furthermore, Sheurich (1994: 300) argues that 'Policy Archaeology, refusing the acceptance of social problems as natural occurrences, examines closely and sceptically the emergence of the particular problem'. This questioning of the problem is precisely what Riddick's social model does; however, I argue that



Riddick does not go far enough at a conceptual level. Sheurich's approach to questioning the 'givenness' is valuable in assessing policy as socially constructing the problem of dyslexia as impairment; which is the key aspect of difference to Riddick's and my own position.

Walton (2010 *passim*), building on Sheurich's work, suggests there is what he calls 'the problem trap'. That is, the 'identification and articulation of the problem is a significant part of the problem' (Walton, 2010: 136). Walton's research focus is educational policy on bullying in British Columbia. However, I argue that we could adopt a way of seeing educational policy surrounding dyslexia and literacy as a 'problem trap'. Sheurich (1994) argues similarly, that policy practices construct some individuals as problems whilst it ignores others; this is 'normalised' through repetition within policy texts. I argue that within Lexism, 'the policy trap' is an aspect of how dyslexics are discriminated against and Othered.

Campbell (2013) has conducted an extensive study of the formation of the dyslexia discourse in scientific literature in the late nineteenth and early twentieth centuries. Campbell follows Foucault (1977) in considering schools as sites of 'disciplinary power'. Campbell (2013: 25) bases his analysis on his interpretation of what Foucault meant by the term 'Bio-power': that is, a means to 'foster behaviours or attributes in the population'. Governments treat the population as a resource to be maximised for economic and social purposes. In so doing, I suggest, they create a 'policy trap' high levels of literacy being seen as necessary for the state. 'Literacy', in Campbell's analysis, became part of the 'technology of power' through the norm. Campbell (2013) rightly argues that the diagnosis of dyslexia was only possible with the development of: the modern state; the school system; the psycho-medical professions; and the use of statistics by governments. These are important features of the socio-historical context for Lexism in its

current form. Furthermore, the need in capitalist societies for literacy-intensive employment creates an economic imperative to maximise the level of literacy in national populations. Campbell (2013: 224) emphasises the 'success of the norm as a technology of power'. During the nineteenth century the 'norm' and 'normativity' became confused and conflated with the statistical average. It was the 'norm', conflated and confused with the average, that made dyslexics 'abnormal' and open to medical investigation (see also, McPhail and Freeman 2005). Campbell (2013:117) notes that 'curability and perceived intelligence' is what made the early investigators into word blindness in the UK deem dyslexics as 'deserving', rather than being stupid or lazy.

Policy Archaeology provides theoretical insights to enable us to problematize the assumptions of policy makers. I argue that we might view dyslexia as part of a policy trap; Campbell's work suggests how this policy trap arose in the late nineteenth century. It is important to note that, although Campbell does not use the term 'policy trap', this is, in effect, what he is describing. Sheurich's argument that we should be more sceptical of why policy problems arise is pertinent if one accepts *either* the social model of dyslexia *or* Lexism. Riddick might argue that we should not question dyslexia as impairment but we should question 'cultural factors' which disable dyslexics further. In contrast, I argue that we should question all the assumptions within current policy agenda, including dyslexia as impairment. Campbell's work would suggest that we are in a policy trap arising from how literacy is viewed, normalised, and reinforced by governments. How we view literacy is, therefore, significant.

#### **(7.4) New Literacy Studies**

Within this section, I focus on New Literacy Studies, whose proponents emphasises literacy as a social practice in given contexts, including education

(Street, 2005). Gee (2009: 359) sums up New Literacy Studies well: that those who follow it see 'literacy as integrally part and parcel of sociocultural practices', that is, ideology is of fundamental importance in studying literacy. Those who follow a New Literacy Studies approach argue that definitions of literacy are reliant on the social or political context in which literacy is situated. I argue that an approach to the social experiences of dyslexics, which takes into account New Literacy Studies, would see the Othering and discrimination of dyslexics as arising from social practices, beliefs, and misconceptions of literacy.

Street (1984: 1) argues that 'what the particular practices and concepts of reading and writing' exist in the context of that society; its culture, beliefs and as such the conceptions of literacy within that society are 'embedded in an ideology.' This, he argues, is the 'ideological model of literacy' (Street, 1984: 7). The opposing model, that of the 'autonomous' model of literacy, he critiques in detail. The 'autonomous' model of literacy presumes literacy to be a neutral technology, an 'autonomous' thing, something which can be measured through standardised criteria. He argues that those different models of literacy are not absolutes; rather, different academics accept, adopt or promote these models of literacy to a greater or lesser extent. His definitions are therefore more cautious than this brief summary would make them appear. I adopt and accept Street's (1984) arguments for the 'ideological' model of literacy which are further developed by Street et al (1993). As such, ideology and socially dominant groups are significant in how literacy is defined. A simplified version of Street's idea of the ideological and autonomous models of literacy is set out below.

**Table 7.3 Two models of literacy compared**

<b>Aspects of the Ideological model of literacy</b> (Street 1984: 8)	<b>Aspects of the Autonomous model of literacy</b> (cf Street 1984).
The 'meaning of literacy depends upon the social institutions in which it is embedded.'	There is a 'great divide' between literate (logical/superior) and non-literate (illogical/inferior) societies.
'Literacy can only be known to us in forms which already have political and ideological significance.'	Literacy is an ideologically neutral technology. Also known as the 'technicist' model of literacy.
'the particular practices of reading and writing that are taught in any context depend upon such aspects of social structure as stratification....where they [can] function as a form of social control.'	Practices of reading and writing are not reliant on context and are the 'source of significant cognitive differences,' and which also assist 'cognitive development' (Street 1984: 23 and 29).
'the processes whereby reading and writing are learnt are what construct the meaning of it for particular practitioners.'	Literacy is a technical tool and not socially embedded in particular practices.
'We would probably more appropriately refer to "literacies" than to any single "literacy."'	Literacy is a set of practices common to all literate societies.
It is 'problematic' to discern a separation between 'any "autonomous", isolable qualities of literacy and the analysis of the ideological and political nature of the literacy practice.'	Literacy is an 'autonomous', ideologically and politically neutral thing.

In questioning norms of literacy, New Literacy Studies problematizes the current, long term and dominant view of literacy. Street (1984, 1993, 2005) highlights the importance of elite groups in defining literacy and education policy, similar to Policy Archaeology. As Campbell (2011, 2013) argues, it was governments in the late nineteenth and early twentieth centuries who sought to enhance literacy standards for economic reasons. The Othering of the less literate, 'the great divide', is an important aspect of the autonomous model that Street critiques. The principal features of the autonomous model, as set out in the above matrix, would naturally lead its proponents to believe that dyslexics are inferior, impaired and 'Other'. McPhail and Freedman (2005) emphasise how dyslexics in

the late nineteenth century were seen as the abnormal/uncivilised and non-dyslexics as the normal/civilised. This Othering, I argue, arises from a belief in the autonomous model of literacy. Street's (1984:8) ideological model of literacy, in contrast, underlines the idea that different literacy practices can 'function as a form of social control'. In other words, Street's view of literacy is that social structures replicate certain practices and norms of literacy that can discriminate, Other, and (ultimately) seek to 'control' those who do not meet these social norms. A viewpoint based in New Literacy Studies and Policy Archaeology would inevitably problematize the idea of dyslexia as an impairment. The 'ideological and political nature of literacy practice' (Street, 1984: 8) cannot be separated from literacy as a whole.

### **(7.5) Reconsidering the Thought Experiment**

In this section I reconsider the thought experiment and relate my findings to both New Literacy Studies and Policy Archaeology. In the thought experiment I imagined that there are two sets of identical twins, the dyslexics (A and B) and the non-dyslexics (C and D). A and C are brought up in a literate culture, but B and D are brought up in a non-literate culture. According to Riddick's model, twins A and B 'have' the *'impairment'* dyslexia; C and D are *neither* impaired nor disabled. I imagined that if the non-dyslexic twin, C, was to be born into a culture with significantly higher literate expectations; C might fail to reach that social norm. Contrary to Riddick's view, I suggested that C now has a biology that impairs his ability to meet norms of literacy. Let us now apply insights drawn from Street's concept of an ideological model of literacy; what counts as literacy is decided by society, and a particular definition of literacy has real consequences. The

ideological model of literacy enables us to further question with Riddick's simple dichotomy of being 'disabled' and being 'impaired'

Let us reconsider the work of Burden (2005) in the light of the ideological model of literacy, drawn from New Literacy Studies and the work of Street. This provides evidence of the Othering of dyslexics; the consequences of a particular way of viewing literacy. Burden (2005: 48) provides several quotations from dyslexic pupils: 'when they found out (I was dyslexic) the head teacher said there was no such thing as dyslexia, just stupid'. And again: '....the teacher used to bully me. Not the other kids. It did not get better.' The evidence presented by Burden could be seen to emphasise Riddick's point that recognition of the impairment is the only means for *dyslexics* to gain recognition. However, if one draws on New Literacy Studies for theoretical insights, one could also argue that Burden's evidence reveals a belief in the autonomous model of literacy adhered to rigidly: that no exceptions to these normative beliefs can be tolerated. If one bears in mind the thought experiment, it is random chance if someone's biology enables them to meet particular norms of literacy. The social consequences, (the 'disabling' of the dyslexics) are obvious in the example provided by Burden. A question examined in later chapters is: to what extent we can discern dyslexia the 'impairment' distinct from the disability?

One can also draw on Policy Archaeology for theoretical insights. The repetition of dyslexics as the problem leaves the views of non-dyslexics who reinforce normative literacy unquestioned, such as the teachers evidenced in Burden's (2005) study. Policy makers, like the teachers in Burden's study, can construct dyslexics as the problem because they have particular beliefs about literacy. Shuerich (1994: 300) emphasises that those who use Policy Archaeology should be sceptical about the 'emergence of the particular problem'. As Walton

(2010) argues, such repetition can create a 'problem trap'. Campbell's (2011, 2013) evidence would suggest that the 'problem trap' of dyslexia in the context of raising literacy levels is a long standing issue. If one bears in mind the thought-experiment, it is possible that policy makers not only socially construct the 'disability' of dyslexia, but, also, the impairment. I examine this possibility in later chapters.

As I argued in Chapter 1, conceptions require no new information to be challenged rather they need a different way of seeing the existing information. Dyslexia as a normative theory (a conception) leads us into a policy trap. A new concept, such as Lexism, enables us to develop new conceptions that will enable us to escape this policy trap. The policy trap exists because policy makers adopt a particular conception of literacy, the autonomous model of literacy. An aspect of the autonomous model of literacy is the tendency to treat dyslexia as something located in the brain, as I problematized in Chapter 4 and 5. The mereological fallacy, when applied to reading arises partly because literacy is often viewed as an ahistorical practice, rather than one which is highly sensitive to context. As I argued in the Twins thought experiment we should not confuse a difficulty meeting social norms of literacy with some 'impairment' in the brain. As Ade-Ojo (2012) highlights there is a tendency by teachers teaching dyslexic adults to adopt the 'metaphor' that dyslexia is some form of disease. This conception of a dyslexic as someone with a disease fails to realise that someone could be disabled by social norms of literacy in one time and place, but not others. My conception of a dyslexic is based on the ideological model – that a dyslexic is someone who is Othered by the specific practices of literacy in their own time and place.

## Conclusion

Within this chapter I emphasised the Othering and discrimination that dyslexics experience within the education system. I examined literature from the sociology of dyslexia, Policy Archaeology and New Literacy Studies. I argued we might conceptualise that literacy and the concept of dyslexia exist within what Walton (2010) terms a 'policy trap'. This corresponds with Riddick's (2001) argument that schools are caught between demands for higher levels of literacy and greater inclusion. I argued that the two models of literacy that Street (1984, 1993) highlights are conceptually important. The autonomous model is compatible with the concept of an impairment; the ideological model that Street favours, however, would problematize such a concept. In reconsidering aspect 1 of Riddick's model, I argued that there is strong evidence to suggest that Riddick is correct. However, one might suggest that Riddick fails to question norms of literacy sufficiently. The third aspect, dyslexia-as-impairment, is itself a form of Othering. Dyslexics, I have argued, are Othered and discriminated against from an adherence to the autonomous model of literacy. Policy makers, through repetition, create a 'problem trap' by which higher demands for literacy lead to the Othering of dyslexics, which in turn leads to further discrimination.



## **Chapter 8 The Temporal Problem**

### **Introduction**

The focus of this chapter is the historical and non-historical (social) factors that impact on how the disability associated with dyslexia is socially constructed. This is the second aspect of Riddick's social model that I highlighted in the Chapter 6. I argue here that the concept of impairment (aspect 3) is problematic because of these historical and non-historical factors. To analyse the impact of the social and historical factors, I focus on what I term the 'temporal problem' of dyslexia. That is, what defines someone as meeting a norm of literacy or failing to do so, depends on the norms of the place and time in which they were born and not their neurological or biological limits. The temporal problem, however, is not just how a dyslexic born in one time may not be so in another, but also how someone born non-dyslexic in *our own time and place* might be defined as dyslexic in another time and place. For these reasons I argue that a biological impairment of dyslexia (aspect 3) is problematic.

In this chapter I argue that expectations of literacy are specific to a particular socio-historical context. Winch (1998) uses 'normative' to refer to the following of social rules, including rules of language use; in this sense a dyslexic is someone who is unable to follow the social rules of literacy in a given time and place. Being dyslexic is a normative matter, as Winch uses the term. Furthermore, we cannot talk of literacy as if it were a nomological matter, as to do so makes no sense. Yet neuro-scientific research focused on dyslexia seems to do exactly that (see for example, Langer et al 2015, Im et al 2016, Ozernov-Palchik and Gaab 2016a, 2016b). Those authors refer to meeting norms of literacy as something decided by someone's brain (a nomological matter). In reality, a person in the world seeks to

meet the normative expectations of a certain time and place; they function, or are unable to 'function' (as defined by society and elite groups), and are judged according to the socially constructed rules of literacy of a certain time and place. Literacy is therefore a normative matter. Someone can therefore meet the normative expectations of literacy in one time and place, yet might not be able to do so in another time and place.

The structure of this chapter is as follows, in the first section, I put forward a thought experiment, 'Three Men and a Time Machine', to highlight the temporal problem through an example. In the second section, I explain what the 'temporal problem' is and its three key features, and I emphasise how historical and non-historical factors impact on normative definitions. In the third section, I briefly acknowledge historical material which is contextually relevant to this discussion. In the fourth section, I reconsider the thought experiment and the importance of the temporal problem. I examine the conceptual problem of the 'biologising' of dyslexia and literacy, and I argue why the temporal problem is potentially a significant flaw in the social model of dyslexia.

### **(8.1) Thought Experiment: Three Men and a Time Machine**

Within this section I propose a thought experiment: 'Three Men and a Time Machine'. I provide a critique of the concept of a single aetiology, the idea that there is some impairment in the brain's systems. The thought experiment is divided into three interrelated scenarios: Jerome, George and Harris (with apologies to J.K Jerome's *Three men and a boat*). This is the merging and adaption of two published thought experiments which also use a time machine as an explanatory device (Collinson, 2012 and 2014). The principal focus of this thought experiment is to examine the importance of the time and place in which a

dyslexic lives. For this reason I focus on three dyslexics: Jerome from the twenty-ninth century, George from the twenty-fifth century and Harris from the twenty-first century. The three dyslexics have different strengths and weaknesses in literacy. In this thought experiment, brain scans and educational psychologists' reports are redundant in assisting us. The biology of these dyslexics stays the same, but it is the context in which they exist which is of primary importance. Biology and education clearly do play a role, however; in one context, someone might be dyslexic (i.e. fails norms of literacy despite intelligence), yet in another, not be dyslexic.

Jerome, a dyslexic born in twenty-ninth century England, goes to the time machine shop and buys the new deluxe Tempomatic™ time machine. In the twenty-ninth century, society has become a completely e-based, oral and post literate culture. Books and other texts are sound files; education comprises of listening and responding to these sound files. In twenty-ninth century society, print-based literacy is taught as a separate and antiquated subject, as Latin and Ancient Greek are for us. Literacy is only relevant to a tiny minority: professional historians and archaeologists. Jerome is aware that he would have been defined as dyslexic in earlier periods of history because of his difficulties in literacy classes, despite improvements in teaching methods and approaches. In our own time and place, Jerome would be defined as 'severely dyslexic'. For this reason, Jerome cannot follow a career as a historian or archaeologist because of the severity of his difficulties; however, apart from this, he is not disabled, Othered, or discriminated against. The term dyslexic has limited use as a concept in twenty-ninth century England. However, Jerome is curious about earlier periods so he uses his new time machine to go back in time to the twenty-fifth century, a period in which demands for literacy are higher than our own twenty-first century definitions, and

very different to Jerome's in the twenty-ninth century. In the twenty-fifth century, due to the political ideology of the government, the use of e-based literacy is banned. In this twenty-fifth century society, Jerome meets a fellow dyslexic called George.

George is a dyslexic born in the twenty-fifth century, at a time of greater demand for literacy than our own. If born in our own time and place, George would *not* be defined as dyslexic. In the twenty-fifth century, however, he is classed as 'mildly' dyslexic. George is actively discriminated against, Othered, and oppressed by the government in that period. The ruling elite is aware that dyslexia is a problematic concept, but, for ideological reasons, they reject and ban the use of e-based literacy alternatives to print or hand-written literacy. George has less inherent difficulties with literacy and memory than Jerome. However, in the twenty-fifth century, George has very limited access to education and learning, more so than if he had lived in our own time and place. On meeting Jerome, George persuades Jerome to take him back to the twenty-ninth century. In the twenty-ninth century George is not disadvantaged or disabled. However, George has a strong sense of dyslexic identity because of the Othering, discrimination, and oppression he faced whilst in the twenty-fifth century. In contrast, Jerome feels no strong sense of dyslexic identity because he has not faced the same oppressive practices as George. After spending some time in the twenty-ninth century Jerome and George decide to visit the twenty-first century; whilst there they meet a fellow dyslexic called Harris.

Harris is a dyslexic alive now, in our own time and place, and is defined by twenty-first century standards as 'moderately' dyslexic. In the twenty-fifth century, Harris would be defined as 'severally' dyslexic. Relative to Jerome, the society he

grew up in has higher demands for literacy; yet relative to George's time, Harris faces lower demands of literacy. George, previously the most disabled of the three, now finds in the twenty-first century that he meets social expectations of literacy; he is no longer dyslexic. Harris has a stronger sense of dyslexic identity than Jerome, but less so than George, because he has not faced active and hostile government oppression. Harris has, however, faced on occasion official indifference, discrimination and prejudice. Jerome and George persuade Harris to come with them to the seventeenth century. The three dyslexics have different inherent capacities for literacy and have grown up in societies with different normative expectations. Stepping out of the time machine into the mid-seventeenth century, they realise that most of those people who are literate spell as they speak and there is a higher tolerance for variations in spelling and expression. George, who is dyslexic in the twenty-fifth but not in the twenty-first, is now (in the seventeenth century) good at literacy. Harris, who is moderately dyslexic in the twenty-first and severely dyslexic in the twenty-fifth, now meets the social expectations of literacy and ceases to be dyslexic. Jerome, however, still has difficulties with literacy but is closer to the norm than in the twenty-first and twenty-fifth centuries.

Within this thought experiment, I propose that we should be aware of the social and historical factors that make someone dyslexic. Ascribing a biological impairment by the use of brain scans to explain the literacy difficulties of dyslexics is inadequate; it fails to acknowledge the temporal problem. Whether someone is dyslexic or not depends on how literacy is defined; a brain scan does not justify the norms of the twenty-first century any more than the twenty-fifth, twenty-ninth, and seventeenth centuries. A sense of dyslexic identity is, I suggest, dependant on a dyslexic's experiences of Othering and discrimination - that is, the form that

Lexism takes in a given time and place. In other words it is Lexism that influences, and to a certain extent determines, the sense of being dyslexic. A dyslexic can choose how they react to Lexism (I would not deny free will), or can elect to be passively defined by Lexism. Furthermore, we can say that it is Lexism *de facto* that defines dyslexics, for as I argue in the thought experiment, it was *not* the dyslexic with the greatest innate difficulty with literacy (Jerome) that had the strongest sense of being dyslexic. It was in fact the dyslexic with the least innate difficulty with literacy (George), who faced the most significant discrimination and Othering (Lexism), and who had the greater sense of dyslexic identity. Yet in our own time and place George would not be classed as dyslexic at all; I would suggest a sense of being dyslexic is formed in reaction to the normative context in which literacy exists (Lexism).

It is reasonable to suggest that dyslexics do have very real practical difficulties with literacy. However, literacy is normative not nomological in nature. This means that a difficulty to 'function' with literacy is context specific or occasion sensitive, not a natural law. It is illogical to look for causation. As Moghaddam and Studer (1997: 186) argue, however, some psychologists hold:

the assumption that causal rather than normative models better explain human behaviour – in other words, that behaviour stems from identifiable “causes” rather than being related to factors such as social norms.

If one talks of 'dyslexia' with causation separate from social norms one has a problem, for such nomological causation would need to be insensitive to context; yet, the ability to 'function' is the ability to function within occasion sensitive or case specific contexts.

Therefore the extent to which literacy is a problem or 'barrier' for dyslexics depends upon how literacy is defined, by whom, and in what way. The role of the ideology of the elite in defining literacy and shaping Lexism is demonstrated most

clearly in the case of George. The fictitious twenty-fifth century dystopian government is an exaggeration and distortion of current government agenda. In the twenty-fifth century the government's agenda to control literacy and dyslexics emphasises the extent to which our own twenty-first century context is important. The twenty-ninth century that Jerome is born into is not technologically different to the twenty-fifth or twenty-first, all have access to e-based literacy, they are, however, all culturally different. Sound-files and e-based texts exist now and could be used in this way. In contrast, the mid-seventeenth century has no such technology yet is more tolerant in its expectations.

## **(8.2) The Temporal Problem**

In this section, I explain three aspects of the temporal problem. Contrary to the social model, the 'impairment' itself is socially constructed; someone could be defined as meeting social expectations of literacy in, for example, seventeenth-century England. Yet, if born in the twentieth-first century, the same person might be deemed to fail social expectations. This is because expectations of literacy are not historically constant, such expectations have been rising in the intermediate centuries of social change. This is what I mean by the temporal problem of defining dyslexia. The temporal problem is, I suggest, part of a wider problem - the tendency to adopt the conceptualization of literacy as purely an ahistorical, technical and educational tool separate from cultural context (Street, 1984). In contrast, I adopt what Street (1984) terms the 'ideological' model of literacy: that 'literacy' is a collective noun for a variety of cultural practices. I argue that our cultural preconception of literacy creates a norm by which dyslexics are judged abnormal. I begin by defining the three aspects of the temporal problem.

The temporal problem of dyslexia is that cultural norms and attitudes towards literacy change radically over time. This includes the shifting nature of norms of literacy by which dyslexics are judged abnormal, which means that dyslexics are not a biologically group which is constant through time. As Street (1984, 1995) and others argue, there are 'multiple literacies', and one could argue that there are multiple forms of any given type of literacy across different periods of its existence. For example, written English in the Anglo-Saxon Chronicle (Ingram, 1993, ed.) is significantly different to contemporary written English. This is not purely in the vocabulary, phrases and grammar used, but also in the medium or recording of the original the text (vellum codex rather than modern paper), and the style of calligraphy and even the alphabet used (see for example Ingram, 1993: xxv-xxxii). As Riddick (2001) notes, English, as a written language, is not an historical constant and neither, therefore, would a dyslexic's difficulties with that language be unchanging. Likewise, the dominant social form of literacy preferred by the elite in a given period is not constant; normative practices and assumptions change with it. 'Dyslexics', therefore, might be defined as those judged 'abnormal' on a social level, even if such norms are not historically constant. Dyslexic identity is similar, in some respects, but not the same as, definitions of ethnicity. In both cases, the boundaries are drawn by social norms and expectations within a culture based on myths of difference: of 'us' and 'them', the norm and 'the other'.

However, I have argued elsewhere (Collinson, 2014) that the temporal problem of defining dyslexia has two other aspects. First, the difficulty of psychological assessments post mortem on individuals in the historical record; second, the limited survival of relevant documentary evidence for earlier historical periods. The post mortem identification of individuals in the historical record as dyslexic has been a matter of heated debate, especially over the identification of



'famous dyslexics' in the historical record (see for example Thompson 1971, Adelman and Adelman 1987, Aaron et al 1988, West 1996, Thomas 2000, and Kihly et al 2000). This academic debate has tended to assume a psycho-medical model of dyslexia built on the diagnosis of an individual, post-mortem. It is certainly fair to argue that historical figures cannot be, with any certainty, assigned a 'dyslexic' identity as defined by psychologists. However, as I argue below, we can discern those Othered by norms of literacy within the historical record.

The limited sources in some periods of history mean that we cannot be sure of the percentage of the population which was literate or indeed what 'literate' meant in a given time or place (see for example, Harris 1989). Nor can we be sure of the extent to which someone in the historical record did, or did not, meet the norms and expectations of literacy in their own society or social group. The identification of individuals within the historical record, therefore, is based not on a psychological assessment but by *the perception* of a process of 'Othering' (see for example Thompson 1971, West 1996). Likewise, the famous historical figures identified on the internet as 'dyslexic' are considered from the limitations of historical evidence as not meeting the norms and expectations of literacy within their own cultural context. This evidence is, however, unlikely to satisfy a psychologist. The shifting norms of literacy over time would also make such attempts at psychological analysis of individuals within the historical record futile: there is no constant of literacy against which to test. However, in different time periods the 'Othering' of the less literate, is, relatively speaking, constant, though perhaps not the form that, and extent to which, this Othering takes; to investigate this 'Othering' indicative historical evidence is set out in the next section. Consider this problem: even if brain scans for dyslexia existed in the distant past and results recorded, this would not assist us. A brain scan might provide an explanatory

account for why a dyslexic fails social expectations of literacy at a neurological level *in a particular time and place* - it does not justify or confirm that social norm as a biological norm.

The most important feature of the temporal problem, for the purpose of this chapter, is the fluidity in norms of literacy. This means, as I highlight in the remainder of the chapter, that dyslexics are not a biologically constant group. As such, brain scans and educational psychology reports do not justify or explain our current norms and expectations of literacy. One cannot assess 'what a dyslexic is' by scanning a dyslexic's brain. The criterion by which a dyslexic is judged to be failing norms of literacy relies conceptually on what those norms are thought to be. The temporal problem, therefore, is of importance for any definition of dyslexia reliant on biology that claims an ahistorical definition of dyslexia. The temporal problem of dyslexia has three features, two of which are of less immediate relevance in my reply to Riddick: the difficulty in engaging Psychological assessment post-mortem, and the limited survival of documentary evidence for defining what being literate was in a given period. These are only relevant factors to consider for the next section where I outline the historical context of the temporal problem.

### **(8.3) Historical context**

Within this section I provide historical evidence for what Riddick (2001) terms 'cultural factors'. This provides a context for the thought experiment which I set out in the first section. There are three key features within the historical context which I emphasise. First, that written English usage, such as spelling conventions, are fluid in the seventeenth and eighteenth centuries; it was only in the later part of the eighteenth century that spelling became stable. Second, the concerns

surrounding spelling and written conventions in the eighteenth century are often ideological rather than practical in nature. They are associated with religion, morality, nationalism and the superiority of the literate over the less literate or non-literate. Third, historical evidence exists that people we might term 'dyslexic' did exist in the period before dyslexia was recognised. This evidence is of the Othering of these individuals as inferior; we of course cannot argue that they are 'dyslexic' as such, in the way a psychologist might. Elsewhere, I use the term 'proto-dyslexic' to refer to these individuals in the historical record (Collinson, 2014). My purpose in this section is not to provide a 'history', rather it is to problematize concepts of literacy as ahistorical; as Street (1984) argues, the autonomous model assumes 'a great divide' between the literate and the less literate or non-literate. This is a form of Othering, but it is also part of the historical context of the temporal problem.

As Riddick (2001) notes, sixteenth century English was fluid, with different spellings of the same word tolerated. This fluidity and tolerance was to be gradually eroded. Changes in English language, such as spellings were slowing down, yet English continued to change, if more slowly, despite the best efforts of some to preserve it in one form. As Upward and Davidson (2011: 298) argue, that from the mid-seventeenth to the mid-eighteenth century, 'a matter of great concern to many scholars and writers' was 'the "fixing" or "ascertaining" of the English language.' The concern of these English intellectuals was to make English 'unchanged and unchanging thereafter' (Upward and Davidson, 2011: 298). There was a desire in this period to end the fluidity of English usage and make it a more rigid language, and to a certain extent they succeeded<sup>10</sup>. Aitchison (1981: 22)

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<sup>10</sup> As Aitchison (1981: 21) notes: 'Around 1700, English spelling and usage were in a fairly fluid state. Against this background, two powerful social factors combined to convert

points out that 'because Latin was primarily written and read, it led to the belief that the written language was in some sense superior to the spoken'. Swift (1712), for example, riled against people spelling as they spoke. An anonymous spelling book (Anon, 1704: 5) criticises those who say such things as 'I can write well enough to serve my own turns' or ask 'can it not be read?' This infers that these were common defences for 'poor' writing. Two educationalists from this period, Dyche (1709) and Scott (1774), both stress the difficulty in teaching children how to read and spell. Todd (1748: 52) suggests that those who struggle with literacy may still be 'fit for business'. This seems to suggest a recognition of the difficulty in teaching literacy, it was not yet a fully established 'given' that a capacity with literacy equated to intelligence. This tolerance, however, was limited and rapidly eroded within the eighteenth century, partly by the desire to 'fix' English and partly by assumptions that literacy conveyed superiority over the less literate.

Educational writers in the eighteenth century assume the superiority of the literate over the less literate. I draw on a few indicative educational texts as examples of what Riddick refers to as 'cultural factors'. Writers in this period associate literacy with religion, morality and nationalism. The anonymous London school master (Anon, 1704: 3) views poor spelling as a source of 'Vice and Wickedness'. Dyche (1709) emphasises the importance in being able to read any chapter of the Bible; likewise Todd (1748: 36), making a similar argument, suggests that this is the difference 'between man and the inferior animals'. Scott (1774: iii) also likens a child who has not been taught literacy to be 'as ignorant as the beast in the field'. Swift (1712: *passim*), in a letter to the Lord High Treasurer,

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a normal mild nostalgia for the language of the past into a quasi-religious doctrine. The first was a long standing admiration for Latin, and the second was powerful class snobbery'.

uses terms such as 'roughness', 'fierceness', 'barbarity' and 'depraved' to describe those who spell as they speak. These texts presume the moral as well as the intellectual superiority of the literate. The anonymous London school master (Anon, 1704) and Dyche (1709) both refer to the value to the 'nation' of enhancing literacy and removing the moral defects of the less literate. However, there is no presumption here of biological superiority; the assumption is of cultural superiority. Writers outside of the educational sphere, such as Edward Gibbon (1776), make similar claims with regards to the 'savagery' of non-literate societies compared to the rationality and civilisation of literate societies. A lack of literacy was seen by European explorers and imperialists in this period as a demarcation of the alien, the savage, the primitive and the 'Other' (Harbsmeier, 1989). As Street (1984, 1993) notes, literacy is interwoven within the ideology of a society and there is a belief in a 'great divide' (in both individuals and societies) between the superior literate and the inferior less literate or non-literate.

The existence of those with dyslexic-like traits in the historical record ('proto-dyslexics') indicates that Lexism existed before scientific descriptions of 'dyslexia'. 'Proto-dyslexics' may not be dyslexic in the modern sense of the term. A very early fictitious account of someone with dyslexic-like traits is in a poem entitled 'the Schoolmaster' by Herodas (Buck, transl 1921), dated to the third century B.C. One of the earliest factual descriptions is Philostratus' (Wright transl, 1921) account of Bradaia Atticus dated to the second century A.D. Perhaps the earliest English attempt at a scientific description is the late seventeenth century account of the anonymous boy from Durham (Athenian Gazette, 1693). English accounts from the eighteenth and nineteenth centuries occasionally mention those with dyslexic-like traits. Hickey's (1777) description of a man named Cressy acknowledges Cressy's high ability as a military engineer but deplores his written

English. Lord Chesterfield's (1984 ed.) letters to his son, from the mid-eighteenth century, frequently criticise his son for what read as dyslexic-like traits.

Chesterfield (1984 ed.) also describes the first Duke of Marlborough, in terms which suggest that Marlborough had dyslexic features<sup>11</sup>. Greville's (16<sup>th</sup> August 1834) diary entry criticises the then Lord Chancellor for his poor spelling, but Greville also ponders over the Lord Chancellor's overall high ability. We cannot assume which of these, if tested now by an educational psychologist, would be defined as dyslexic. My purpose here is to highlight that the Othering of the less literate but intelligent (Lexism) pre-existed 'dyslexia'. The historical context of the temporal problem of dyslexia suggests who is, or is not, Othered by those norms is not a historical constant and as such, it is highly questionable that there is a biological 'impairment'.

#### **(8.4) Biologising literacy**

Within this section I consider the ramifications of the temporal problem of dyslexia and reconsider the thought experiment. I examine to what extent dyslexia and norms of literacy are biological and 'biologised'. It is highly problematic to assert a biological norm of literacy. One can discern social norms of literacy in some times and places, and one can talk of average literacy ability, again, in different times and places. Arguing for a biological impairment with no reference to social norms is, however, problematic. I consider two possible defences for dyslexia as an impairment: first, a biological causation; and second, one based on function rather than cause. I argue that the temporal problem of dyslexia problematizes a biological causal explanation. A definition based on function, however, could provide a defence based on the practical need for literacy in a

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<sup>11</sup> Marlborough is noted by historians such as Hibbet (2001: 3-4) for his poor spelling even by seventeenth and eighteenth century standards, as well as his longstanding difficulties with reading.

given time and place. This does not completely ignore the temporal problem, as the thought experiment shows that what is defined as necessary may depend on the expectations of an elite. In the next chapter, I propose a thought experiment which questions the possibility of a definition based on function rather than cause. The thought experiment in this chapter emphasises the problem of claiming a purely biological explanation for dyslexia.

The temporal problem of dyslexia highlights the difficulties of biologising literacy and dyslexia (see, for example, Frith, 2002). Some of those in the field of dyslexia are cautious of this biologising. Beaton (2004; 10), for example, stresses that we should not 'reify' dyslexia into a 'thing'; he would see dyslexia as a typology, a means of classifying literacy difficulties. Stanovich (1994), Reid Lyon (2001) and Waber (2001) all note that reading is not a natural or evolutionary process. Indeed, Waber (2001: 107), a neuroscientist, stresses that, 'from an evolutionary perspective, it should not be surprising that so many children encounter a difficulty adapting to this expectation of literacy'. Lopes (2012) provides a critique of the biologising of literacy amongst teachers, SEN specialists, Physicians and Psychologists; based on response to questionnaires from almost five hundred participants. Nearly 70 per cent believe dyslexia to exist in the brain, and it was SEN teachers that laid greatest emphasises on a biological perspective of dyslexia. Lopes (2012: 127) draws the conclusion that it 'may be easier for teachers to accept that dyslexia is a disease....rather than a teaching deficit.' In contrast to Lopes, I argue that the existence of literacy difficulties is not necessarily indicative of a teaching deficit any more than it is of disease.

The temporal problem enables us to question the belief in a biological impairment of dyslexia. The temporal problem of dyslexia, as I express in the

thought experiment, suggests that biologising normative literacy and, therefore, dyslexia, is problematic. It is reasonable to ask why the idea of a biological impairment remains an attractive concept to some. It may be an adherence to the popularity of the autonomous model of literacy as a monolithic thing rather than acceptance of the concept of 'multiple literacies' in different societies or social contexts (Street, 1984). It could be that social elite groups have, historically, continued to raise normative expectations of literacy and, furthermore, medicalised the failure to meet those norms (Carey 1992, Payne, 2006 and Campbell 2013). Shaaywitz et al (1992) argue that dyslexia represents only the lower end of the normal reading bell curve. Yet the concept of the biological norm of literacy, by which dyslexics are judged to be abnormal, persists. The temporal problem of dyslexia suggests that this concept is unlikely for four reasons. First, norms of literacy change over time with expectations and elite agenda. Second, there is no evolutionary norm of literacy by which it can be pathologized. Third, dyslexics as a group change over time: they do not form an historically consistent group so their biology is not constant. Fourth, literacy is a social practice: any concept of a biological impairment would need to account for social factors, not just biological ones. Therefore, any defence of the third aspect of Riddick's model (impairment), which is reliant upon a biological impairment, is questionable.

A defence of impairment based on function, rather than a specific biology, is not contradicted by the temporal problem. Though it is, I suggest, weakened, as the thought experiment in this chapter shows the influence of the elite in defining what 'functioning' in literacy is. Therefore, if Riddick sought to defend the third aspect of her model against the temporal problem of dyslexia, she could do so by invoking or adopting a definition based on the importance of the function of literacy. This would be similar to a 'Functionalist' definition. Functionalists agree



that 'what matters for being in a given mental state depends on the roles, occupied and not what occupies them' (Braddon-Mitchell and Jackson, 2007: 50). In other words, in the case of dyslexia, the impairment could be whatever fulfils the role of inhibiting or impairing someone's capacity with literacy. Functionalists refer to this as 'multiple realisability'; this is a common feature of the Functionalist position (Braddon-Mitchell and Jackson, 2007). The temporal problem does not contradict there being numerous reasons why someone may struggle with literacy (multiple realisability). Nor does the temporal problem negate the value of emphasizing that it is functioning within a society which is of importance, rather than the exact origins of this difficulty. I argue in the next chapter, however, that such a defence is dependent on who or what defines what 'functioning' is and for what reasons. It is a mistake to ignore the role of the elite or wider society in defining norms and expectations of literacy.

An awareness of the temporal problem of dyslexia also enables us to further undermine the mereological fallacy (as applied to reading). As I argue in Chapter 4, it is human beings who read in a particular context, for a particular purpose. The social construction of literacy in different ways, in different times and places, enables us to discern that a biological or neurological 'cause' of dyslexia is not possible. Literacy, as we define it is not a historically constant set of actions and practices. For scientific criteria to be applied to literacy becomes problematic because a scientist has no control over the key variable (social norms of literacy). It is the Othering of the less literate that is historically constant, though not its form or who is Othered and why. Any biological explanation of dyslexia cannot be flexible enough to recognise literacy as a social practice. Riddick could adopt a definition of dyslexia based on a failure to *function* as a possible defence of her

model at this juncture, and a critique of this position is the focus of the next chapter.

## **Conclusion:**

Within this chapter I focused on the temporal problem of dyslexia. In the thought experiment, I set out three scenarios for three different dyslexics in four time periods. This highlighted that the dyslexic population is not historically constant. I provided a definition of what the temporal problem is and why it is significant. I examined historical material which provided a context for the thought experiment. I emphasised the original fluidity in English usage, the concept of the moral and intellectual superiority of the literate, and the existence of those I termed proto-dyslexics. I examined the biologising of dyslexia and literacy. I considered to the extent to which we can question the concept of impairment reliant on biology or function. The principal argument in this chapter is that the temporal problem cannot be ignored if one seeks to argue for a biological cause for dyslexia. If one adopts a definition based on function, however, one might claim that what matters is the practical limitations dyslexics face in a given time and place. However, as the thought experiment suggested, the elite have a role in defining what norms of literacy are in a given time and place.

The temporal problem of dyslexia questions a purely biological origin, regardless of brain scans or educational psychologists' reports. These are reliant upon an assumed unchanging norm, whereas literacy has shifting conceptual foundations. I argued that these social norms are products of a time and place, and there is nothing inherently biological about them. My purpose in this chapter was to provide a critique of the second aspect of Riddick's social model, historical and non-historical (social) factors, what Riddick terms 'cultural factors'. The

temporal problem of dyslexia is a product of these historical and non-historical factors. That is, the second aspect of Riddick's model enables us to begin to engage in a critique of the third aspect of her model (impairment). In the next chapter, I continue to analyse the concept of impairment I argue that both biology and function are inadequate as a basis for dyslexia. The concept of the superiority of the literate is something I return to in Chapter 10. I argue that the idea that the literate are superior links to Ryle's (1949) critique of the intellectualist doctrine. This chapter, however, emphasises the problem of assuming any biological norm of literacy. Such assumptions inevitably lead one into the temporal problem of defining dyslexia: norms of literacy are socially and historically fluid.

## **Chapter 9 Dyslexia as impairment**

### **Introduction**

The focus of this chapter is dyslexia as an impairment, which is the third, and final, aspect of Riddick's social model of dyslexia. I argue that there are two alternative possible foundations: an impairment based on biology; or, an impairment based on function. Both are problematic. A biological definition would mean that dyslexia has a cause to be found 'in the brain' and a clear set of necessary and sufficient conditions by which it could be defined. As I argue in the previous chapter, this is questionable; in this chapter I problematize this further. Dyslexia as an impairment based on a definition of a failure to function, would mean that dyslexia (the impairment) is whatever fulfils the role of impairing literacy acquisition. In this chapter, I argue that 'functioning' is actively defined by elites, it is not purely practical nor is it ideologically neutral. My purpose in this chapter is to both highlight and provide a critique of these two possible foundations of this aspect of the social model.

One could argue, like the British Psychological Society (BPS) (1999) or APA (2013), for dyslexia or a literacy based disorder as purely a difficulty to function. However, there is a problem with this conception of dyslexia, for it ignores the social agency of elites in designating how 'functioning' is defined, by whom and for what purposes. 'Functioning' in literacy is not a single finite set of skills or capacities for literacy is not one thing; there are 'multiple literacies' in different societies, times and places (Street, 1984). Literacy (and therefore functioning in literacy) is context and case sensitive, and is a normative matter, in the sense used by Winch (1998), as following social rules which may indeed be

necessary for certain tasks or practices. It is also a normative matter (in the way sociologists use the term) because the perception of a failure to follow social rules leads to the Othering and discrimination of dyslexics. Dyslexics have difficulties in literacy, but literacy is not one thing found in all cultures, times and places. If functioning in literacy is normative (and not nomological), as the APA and BPS would seem to agree, then it makes no sense to talk in terms of 'disorders' or use such terms as 'Specific Learning Disorder' or Reading disorder as if they were things in the world. By 'thing' I mean something that can be defined, measured, and which people can be assessed to 'have' (and have to pay for assessments to prove that they 'have' it). It is misleading or disingenuous to talk as if literacy difficulties were a thing because non-specialists, including children and parents, will believe that when we talk of 'Specific Learning Disorder', or Reading disorder that this is a thing in the world, rather than an abstract conception of difficulties with literacy.

The structure of this chapter is as follows. In the first section, I propose a thought experiment, 'The Cannae Rememberers' (previously published in Collinson 2012). I argue that 'The Cannae Rememberers' thought experiment highlights that 'dyslexia' actually fulfils the purposes of the elite because it reifies certain characteristics as impairment; for this reason, a definition of dyslexia based on function is problematic. Within the second section, I examine indicative authors within the dyslexia debate who reject the concept of dyslexia. I suggest that their arguments are convincing ones. In the third section, I engage in a critique of a function-based definition of dyslexia. Such an approach could be based on the idea that a 'dyslexic' is someone who fails to meet norms of literacy for any number of possible reasons: which is termed multiple realisability (Braddon-Mitchel and Jacksons, 2007). In the fourth section, I reconsider the thought

experiment and highlight how it reveals problems with both biology and function as foundations for a definition of dyslexia.

### **(9.1) Thought Experiment: The Cannae Rememberers<sup>12</sup>**

Within this section, I propose a thought experiment: 'The Cannae Rememberers'. The purpose of this thought experiment is to show how the norms and beliefs of a particular society define 'impairment' and how that 'impairment' is investigated by its educational elite. The norms of a particular society also determine who is defined as a potential member of that elite and who is deemed inferior or less productive. The thought experiment acts as an object of comparison; I provide an example of a fictitious society which values memory over literacy. In the thought experiment, the aspect of society which I change is that of literacy, I replace it with memory as a related impairment, to enable the reader to see the importance of normative aspects of literacy in the case of dyslexia. This enables me to highlight particular aspects within our own society in the case of dyslexics and definitions of dyslexia. The danger with psycho-medical concepts, I argue, is that they can ignore the role of the elite in creating and replicating social norms by which members of a society are included or excluded. The thought experiment highlights the role of an elite in defining those deemed as the 'Other'.

Consider the following thought experiment; there is a society in which literacy exists but is not valued. This society is run by a tiny elite of 'Rememberers'; those who have the capacity to remember 'word perfect' large amounts of oral information. Literacy is thus deemed by them to be of little value and limited use and, as such, literacy is not taught; indeed, it is in their own self-interest that this state of affairs continues. This is not a conspiracy or conscious

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<sup>12</sup> "Cannae Remember", here means those who 'Can't remember', from Scots dialect.

political oppression but, merely, the result of the Rememberers' view of the world. The need for literacy in this hypothetical society is seen as our society might view 'assistive technology': it is considered a 'crutch' for those who are unable to remember information, whereas basic intellect and skill is shown by word perfect remembering of a large amount of propositional knowledge. In such a society, there are three ranks: 'Rememberers' at the top, the 'Cannae Rememberers' (those with the weakest memories) at the bottom, and the 'Typicals' (everyone else) in the middle.

The 'Cannae Rememberers' would, of course, exist for a multitude of reasons (multiple realisability). Furthermore, dyslexics would not exist per se as dyslexics, i.e. those with a difficulty with written language. They would be classed as 'Cannae Rememberers' alongside everyone else with memory difficulties. The group called the 'Cannae Rememberers' might well include dyslexics, dyspraxics, some of those with Aspergers Syndrome, or any other reason that they cannot remember things easily. If we were to apply Wittgenstein's concept of 'family resemblances' to the Cannae Rememberers (as Smythe and Everatt 2004 do so for dyslexia), we could indeed find that there is no essence, or one thing, that make someone a Cannae Rememberer. Therefore, we would find some Cannae Rememberers showing signs of clumsiness or social awkwardness. Some of the Cannae Rememberers, i.e. the dyslexics, would also show signs of poor literacy skills when they are taught literacy as a form of 'assistive technology' to help overcome their social disability of poor memory. Likewise, however, both the Typicals and the Rememberers sometimes show signs of clumsiness or social awkwardness. The multiple realisability of the Cannae Rememberers is clearly true but the concept itself arises from the beliefs of the Rememberers, arbitrary criteria based on social norms and expectations.

'Rememberer' scholars, in this thought experiment, try unsuccessfully to come up with a 'scientific' explanation for why some apparently intelligent people are Cannae Rememberers. They likewise fail to create an agreed set of measures, lists of traits, or necessary and sufficient conditions for the Cannae Rememberers, beyond the fact that their memory is not very good. The Cannae Rememberers do show a wide range of intelligence, in defiance of the social expectations of this society. Some 'Rememberer' scholars argue that they should subdivide the Cannae Rememberers into those with 'specific Cannae Remember deficit' (i.e. those who are of 'average' intelligence or above), and 'general Cannae Remember deficit' (i.e. those who are below 'average' intelligence). Here, the debate of the Rememberers is similar to the academic debates around dyslexia: both are based on arbitrary criteria based on social norms.

The role of the 'Rememberers' is filled in our own society by policy makers, Neuroscientists, Psychologists and Educationalists. In Chapter 5, I highlight the problematic necessary and sufficient conditions within definitions of 'disorders' relating to literacy by the APA and WHO. Like the 'Rememberers', the WHO and APA are uncritical and unreflective about *their* role in creating and defining these 'disorders'. Certainly, a difficulty relative to the rest of the population with literacy or memory may exist, but by ignoring social norms and expectations conceptual problems inevitably arise. Dyslexia as a concept is recognised as problematic, (for example Rice with Brooks, 2004), yet why this is so would require Psychologists and others to be far more self-critical and reflective. In the case of the Cannae Rememberers, a single cause (or even a definition based on multiple causes) is absurd. It is the Rememberers who define who is 'impaired' or not and why. It is the Rememberers who define what 'functioning' is, or is not, according to the values of the Rememberers themselves. Nor can the Rememberers' claim some



form of utility or practicality for the label Cannae Rememberer, or that it exists outside of this ideological context.

The Cannae Rememberers' principal problem is not poor memory, it is living in a society with an adherence to normative memory which then *creates* them as an impaired group. Normative literacy, I argue, is equally problematic; however, some authors claim that there is a practical use of the concept of 'dyslexia': that regardless of causation, the concept of dyslexia is of practical utility. For example, Beaton (2004) argues that dyslexia is useful as a typology of literacy difficulties. However, as Elliot and Gibbs (2008, 2012) argue, dyslexia, on occasion, is used as a term to include all types of reading and spelling difficulties; that is, literacy difficulties with multiple forms and causation. Elliot and Gibbs (2008: 484) suggest that using the term dyslexia in this way is problematic because 'Defining dyslexia in such a fashion means that the construct no longer helps us differentiate between those with reading difficulties in any way that is helpful to those who are seeking specialist insights that can inform intervention'. In other words, if 'dyslexia' is based on multiple realisability, it has no practical utility. Riddick (2000), however, argues for a political purpose; dyslexics themselves find the term useful to challenge discrimination and gain access to support. I would suggest that that a claim to political utility is a false economy; consider again the Cannae Remmbers as an object of comparison for dyslexics. The claims of the Rememberer scholars for any practical use of talking of a Cannae Remember deficit actually disguise the 'Memorism' (so to speak) of their society. Likewise, claiming a practical or political utility for 'dyslexia' as a concept is questionable.

One cannot escape the role of the Rememberers in constructing, maintaining and replicating the 'Memorism' in their society within this thought

experiment. Likewise within our own society the white, male, and non-dyslexic Oxbridge elite have an influence disproportionate to their actual numbers. This influence exists within the political class, the civil service, academia and the media. This elite, like the Rememberers, are the product of a particular education system which values certain skills and abilities over others. The white, male, and non-dyslexic Oxbridge elite is not 'out to get' dyslexics, so to speak in fact dyslexics are, I would suggest, largely irrelevant to their world view. The elite does not 'oppress' dyslexics because it does not need to; dyslexics are limited and socially controlled through the norms of the society they live in. Consider again the Cannae Rememberers, how little power they would have in challenging the Memorism, and Rememberer elite within their own society. I would not argue for active and conscious oppression of dyslexics; for there is no requirement to oppress those whose social position is such that they are too weak to resist. As Campbell (2011, 2013) argues, dyslexics are of concern to governments because they are deemed economically unproductive. The context for debates about 'dyslexia', with dominant discourse of psychology, or, government policy, is within the context of the elite seeking to remediate a minority deemed socially dysfunctional or economically unproductive. 'Function', therefore, is not a politically or cultural neutral term.

## **(9.2) A single aetiology of dyslexia**

In this section I examine two important authors within the dyslexia debate who reject the concept of dyslexia: Keith Stanovich, and Julian Elliot. I suggest that Stanovich and Elliot's arguments are convincing ones, especially with regard to any claim that dyslexia has a single aetiology or cause. In this section I focus on

two *indicative* articles: Stanovich (1994), and Elliot and Gibbs (2008).<sup>13</sup> Stanovich is highly critical of any assumptions that reading ability and ‘cognitive’ ability can be mistakenly assumed to be some form of biological norm, dismissing the lack of empirical evidence for these assumptions as a fundamental flaw. He also acknowledges that there are poor readers of ‘high intelligence’ and, therefore, that limited skill in literacy does not indicate low intelligence (Stanovich, 1994: 580), as do Elliot and Gibbs (2012). In doing so, both reject ‘dyslexia’ at a conceptual level, yet recognise the existence of those frequently termed ‘dyslexics’. Stanovich and Elliot are rejecting dyslexia as an explanation for this group’s existence; they are not rejecting the existence of poor readers of ‘high intelligence’.

Stanovich (1994) attacks the idea that discrepancy between IQ scores and reading ability should be seen as the basis for arguing that ‘dyslexia’ exists. Furthermore, he argues that other traits, such as poor left/right hand differentiation, for example, which are used on occasion as indicative of ‘dyslexia’ are no different, proportionally, between ‘dyslexics’ and non-dyslexics. He contends that there are no difference between ‘poor readers’ with lower IQ and ‘poor readers’ with higher IQ (apart from IQ) that would lead us to talk of something such as dyslexia. Stanovich’s criticisms of dyslexia as a dominant discourse or scientific construct are convincing. He concludes that:

Thus, the research literature provides no support for the notion that we need a scientific concept of dyslexia separate from other more neutral, theoretical terms such as reading disabled, poor reader, less-skilled, etc. Yes, there is such a thing as dyslexia if by dyslexia we mean poor reading. But if this is what we mean, it appears that the term dyslexia no longer does

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<sup>13</sup> Rather than discuss all of their work I have selected examples of Stanovich’s and Elliot’s work. In the case of Stanovich I have selected one of his articles: ‘Annotation: Does Dyslexia Exist?’ (1994). Stanovich (2000) has collated many of his articles and reflections on reactions to them into a monograph which also informs my view. As with Stanovich, I discuss only one of Elliot’s articles: ‘Does Dyslexia Exist?’ (2008) co-authored with Simon Gibbs. Again, as with Stanovich, Elliot has produced other work (Elliot and Gibbs 2012, Elliot and Grigorenko, 2014), which also informs this discussion.

the conceptual work that we thought it did. Indeed, whatever conceptual work the term is doing appears to be misleading. The concept of dyslexia is inextricably linked with the idea of an etiologically distinct type of reading disability associated with moderate to high IQ.

(Stanovich, 1994: 588)

The idea of defining dyslexia in terms of a discrepancy between IQ scores and reading ability, since the 1990s, has been rejected (see, for example, Smythe et al 2005, Elliot and Grigorenko 2014). Yet the concept (regardless of terminology) continues to be used for those deemed to have poor literacy and average or above average intelligence (for example, APA 2013).

A similar position to Stanovich's is that of Elliot and Gibbs (2008: 475), who argue, as Stanovich did, that 'attempts to distinguish between categories of "dyslexia" and "poor reader" or "reading disabled" are scientifically unsupportable, [and] arbitrary.' Elliot and Gibbs (2008: 484) reject the use of dyslexia as a catch-all term 'to describe all forms of reading decoding and spelling difficulty [...] its very broad inclusivity is problematic for educational purposes'. They acknowledge the important role of normative assumptions and practices of literacy in creating this 'othering', and suggest that schools may:

wish to create (or perpetrate) a category of child thus outside the school's realm of expertise. The dyslexic child thus not only has to deal with his or her own perceptions of failure but also bear responsibility for the school's failure.

(Elliot and Gibbs, 2008: 486)

This notion is questionable; schools and educational psychologists working for local authorities have traditionally avoided using the term dyslexia at all, preferring 'SpLD' instead (Riddick, 2000). Elliot and Gibbs might be right to criticise dyslexia or any similar concept; however, on occasion, they seem to lapse into blaming teachers or schools for the dyslexic child's genuine difficulties with literacy.

Frith (2002) is an example of the reaction of pro-dyslexia researchers to these kinds of arguments. Frith (2002: 179) argues that the 'arguments that dyslexia is just a social construct rather than a natural entity are no longer worth attacking, so thoroughly have they lost their ground'. She goes on to acknowledge, however, that 'the consensus around the nature of dyslexia is somewhat precarious' (Frith, 2002: 179). She accepts that the diagnosis of dyslexia is based on 'behavioural criteria', and that 'these criteria remain arbitrary', and furthermore there is no agreement whether dyslexia is 'qualitatively different from normal' or part of the continuum of abilities in literacy (Frith, 2002: 179-180). One could reinterpret Frith's evidence and arguments to suggest that, actually, it is the existence of 'dyslexics' which is non-problematic, whereas dyslexia remains conceptually vague and contested, contrary to her opening statement. Both Elliot and Gibbs (2008: 486) and Frith (2002: 180) use the word 'arbitrary' to describe the criteria adopted to judge whether someone is dyslexic or not.

### **(9.3) A definition based on Function**

Within this section I consider a possible defence of the concept of dyslexia as impairment as based on functioning. I suggest that Terzi (2008) provides a strong position that someone might wish to adopt. I consider two problems with focusing on the idea of defining dyslexia by whatever fulfils the role; that is whatever inhibits literacy functioning. First, that what is defined as functioning is decided by social norms, values and the beliefs of society as a whole or of the elite. Second, if dyslexia relies on the criterion of multiple realisability, the term is of limited value in assisting teachers to provide remediation (Elliot and Gibbs, 2012). A position based purely on function is, therefore, inadequate to justify the use of the term dyslexia as an impairment; it provides no conceptual clarity, as I sought

show in the thought experiment. I also suggest that, as such, dyslexia also hides society's Lexism by reinforcing normative literacy rather than challenging this as problematic. The problem with such arguments is that they can actually create more conceptual and practical difficulties than they resolve.

The 'capabilities approach' (Terzi, 2008) to SEN, combined with multiple realisability, might be the basis for a possible utilitarian defence of dyslexia-as-impairment. She argues that the capabilities approach to SEN enables us to move to a concern for the whole context, regardless of whether the disability is biological or social in origin (Terzi, 2008). As Terzi (2008:3) notes, the 'central concern of the Capability approach is evaluating how well people's lives are going with reference to their "Capability to function", that is, their real opportunities to be and to do, what they value.' What Terzi (2008) means by 'capability' is, she clarifies, an individual having effective opportunities for functioning. She argues that, in the case of dyslexia, functioning within a society for purely practical reasons relies on literacy. For this reason, someone might argue that dyslexia is a useful term regardless of cause because it fulfils a useful function.

The utilitarian defence of dyslexia-as-impairment relies on the social norms being practical, logical, functional, and so on, to meet the needs of that society. However, as Payne (2006) points out, 'functional literacy' is itself based arbitrary criteria decided upon by psychologists. For the utilitarian argument to be convincing literacy would have to be purely practical and ideologically neutral for this defence to be plausible. As Street (1984, 1993) argues what counts as literacy in any given society is socially constructed. One might argue that the functioning within a society is the important factor, as a position based on Terzi's (2008) work might suggest. Yet we might ask how functioning is being defined and by whom

and for what purposes. Someone might, at this point, adopt a Functionalist position. However, if one argues that dyslexia has multiple causes, then the term dyslexia is of limited practical use, as Elliot and Gibbs (2008, 2012) argue, (even if such norms make sense) if dyslexia is said to include *all* types of reading and spelling difficulties; it does not assist us develop interventions that can assist dyslexics.

#### **(9.4) Reconsidering The Cannae Rememberers**

In this section, I reconsider the thought experiment in the light of the rest of the chapter. I emphasise that the importance the form our society and culture has in what we define as problematic or not. When policy makers, Psychologists, educationalists and academics, use technical terms such as dyslexia or similar ‘disorders’, they engage in language use which can at times be conceptually problematic. They may claim to a ‘scientific’ or empirically justified definition of dyslexia. The Rememberers could equally claim that the existence of the Cannae Rememberers is empirically proven; Cannae Rememberers do, after all, exist in such a society. Yet there is no single cause that makes someone a Cannae Rememberer and multiple realisability is of no assistance. The culture of policy makers, Psychologists, educationalists, academics, and Rememberers is therefore similar in its uncritical and unreflective assumptions. The education system, within our own society and the fictitious education system in the thought experiment, reflect the agenda and beliefs of the elite. What is defined as support or reasonable adjustment is not based on a strictly practical definition. It is the elite or the norms of society that define what functioning, or not functioning, equates to according normative criteria. In the discussion below, I focus on the similarities

and differences between Lexism and the 'Memorism' (so to speak) in the thought experiment.

Policy makers, Psychologists, educationalists and academics (in terms of dyslexia) and Rememberer scholars (in the thought experiment) have a particular view of the world. This view is reflected in the language use our elites and 'Rememberer' scholars engage in; the creation of such concepts as 'dyslexia' and the categorisation of the Cannae Rememberers. The question that this thought experiment raises is: to what extent is the academic and educational debate around dyslexia and literacy more or less logical than the society described in the thought experiment? It would seem a very odd notion to us to attempt a 'scientific' explanation or to create a set of measures or lists of traits for the Cannae Rememberers. It would be equally odd to somehow perceive the essence of what a Cannae Rememberer is or to even try to find the 'Cannae Rememberer gene'. We would also recognise that any appeal to multiple realisability is of limited utility. *Our* view of the world is such that we would recognise these attempts to be foolish. Yet the view of the world of our elites leads them on occasion to make similar, if different, assumptions. Similarly, we should exercise caution in thinking there is some form of 'dyslexic gene' or we can usefully create a set of necessary and conjointly sufficient conditions for dyslexia.

The thought experiment provides an object of comparison for our education system and society. It highlights an aspect of a view of the world in this imagined society which we might term 'Memorism' (so to speak); a fundamental part of that society because of the nature of that society's elite and the culture they value and promote. Lexism, likewise, fulfils a similar role within our own society. Contrary to Lopes (2012), we can neither talk of a 'teaching deficit' any more than we can talk



of some biological deficit. The failure of the teachers in our own society and that of the thought experiment to meet impossible and impractical social demands is unsurprising. Hornby, et al (1997: 49) argue: dyslexia is 'of less importance than the matter of how we can best support and alleviate the difficulties of all those who struggle with reading, writing, spelling and numeracy.' This is an appeal to the importance of function, however, what is meant by to 'support and alleviate' difficulties with literacy and the practices we engage in to do so, may often act to reinforce the very norms and assumptions we should question the most. This thought experiment seeks to question those things that we should question the most; failure to do so can result in either the child or the teacher being blamed. This ignores the problems with the education system itself the demands and expectations placed on teachers by society and by policy makers unreflective of their own normative assumptions.

I argue that in Rememberer society, *and our own*, a category mistake has been made. A category mistake is making a vague collective phrase a 'thing' separate from its component parts (Ryle, 1949). Ryle (1949: 19) used the example of thinking that 'team spirit' is a separate member of a sports team from the other members of that team. The category mistake in the dyslexia literature is not so different from the category mistake within the thought experiment; this leads to a reification of dyslexia and the Cannae Rememberer deficit. A key point in both our society and that of the thought experiment is the role of the elite in creating the category mistake; this arises because of their particular view of the world. In both cases there is a set of normative assumptions based on propositional knowledge. In the thought experiment the normative assumptions are based on memory and the memorisation of texts. In our society it is the propositional knowledge of spelling conventions and reading print-based texts which is valued. Now consider

what would be the reaction by the Rememberers to the suggestion that their normative assumptions are a category mistake, ill-thought-out and counter-productive? How open to change might they be? I suggest that they would be deeply resistant to change; likewise, our own elites may be equally resistant to change. The 'Memorism' of this thought experiment, therefore, is not so different from the Lexism that I propose; both lead to a category mistake.

A society's, or an elite's, view of the world is important in defining what is judged as impairment and what is not. I argue that in the case of dyslexia, an interpretation of empirical evidence may still be conceptually flawed by a failure to be suitably reflective about one's own assumptions and beliefs. An education system that adopts cultural beliefs unquestioningly may emphasise 'functional' aspects of a difficulty in failing to meet social norms, without questioning those social norms. This may, in turn, lead to a category mistake; the reification of perceived characteristics and difficulties as in the case of the Cannae Rememberers. If we treat the 'Memorism' of the Rememberers as an object of comparison for the Lexism apparent in Psychological accounts of dyslexia, we can begin to discern the bias of psychologists. There may be many reasons why someone is dyslexic or a Cannae Rememberer, both may struggle to function within their own society. A definition of dyslexia based on function, however, would ignore the role of the elite or society in constructing what 'functioning' means in each case. In our own society, it is not just psychologists, but policy makers and educationalists, who decide what functioning is. It is policy makers, however, who decide what form functioning in literacy takes within schools.

'Impairment' is a questionable concept within Riddick's social model. As I have argued in Chapter 1, it is clearer to talk of someone being good or bad at

literacy, rather than impaired. The concept of being impaired in literacy would be suggestive of a normative conception of literacy. This normative conception of literacy may lead someone to look for a flaw or disorder in someone's brain, for if literacy is 'normal' and expected for someone who is intelligent and educated then we might expect the explanation to be in an 'abnormal' brain. In the previous two chapters (chapters 7 and 8), I provide a critique of the first and second aspects of Riddick's model, Othering, and discrimination, and historical and social factors. I suggest that these aspects of Riddick's model are convincing, but lead us to question the third aspect: dyslexia-as-impairment. In the next chapter, I propose an alternative conceptual understanding that rejects the concept of dyslexia as impairment. I suggest, in that chapter, that dyslexia (or *any other equivalent concept* of impairment) is merely a form of Othering which arises from confusing propositional knowledge with original thought or intelligence by considering Ryle's (1949) critique of the intellectualist doctrine.

## **Conclusion**

Within this chapter I considered the two possible foundations for using the term impairment: biological impairment, or a definition based on functioning. I considered the work of Stanovich and Elliot, and suggested that they present convincing arguments for rejecting the concept of a 'single aetiology' of dyslexia. I considered and rejected multiple realisability as an alternative basis for arguing that dyslexia is an impairment. I proposed a thought experiment, the Cannae Rememberers, as an object of comparison for dyslexia. This thought experiment clarified my position further: that neither a single aetiology nor function is an adequate defence for the concept of dyslexia as an impairment. I suggested that in the case of the thought experiment, and within the dyslexia debate, the view of the

world of those who define impairments leads them to be unreflective and uncritical about their role in defining what is, or is not, an impairment. I argued that dyslexia, like the concept of the Cannae Rememberers, is an idea which leads us further into conceptual confusion.

## **Chapter 10 The Intellectualist Doctrine**

### **Introduction**

In this chapter, I suggest an alternative view to that proposed in the social model of dyslexia. I argue that the conceptual confusion between forms of propositional knowledge (including aspects of literacy) and intelligence is of key importance. My purpose in this chapter is to provide the conceptual foundations for a rejection of dyslexia as impairment. I suggest that dyslexics are those who are Othered and discriminated against because of the popularity of this conceptual confusion. Ryle (1949) calls confusing and conflating propositional knowledge with intelligence the 'intellectualist doctrine'. He argues that there has been a long-standing tendency to confuse what he calls 'knowing how' and 'knowing that'. Knowing that is knowledge and the remembering of facts, criteria or theories. Knowing how, in contrast, is the ability to *apply* criteria or to *understand* facts or theories. In the case of Lexism, the conceptual confusion is that intelligence should accompany a capacity for propositional knowledge of literacy. I apply my understanding of the intellectualist doctrine to all three aspects of the social model I examined in the three previous chapters.

Empirical evidence has existed, from the inception of dyslexia in the nineteenth century, that recognised that those with 'word blindness' (dyslexics) were neither stupid nor lazy (Miles and Miles, 1999). Yet, it could be argued, we need no empirical evidence to realise this. Indeed, it was the mistaken belief that there was some form of nomological relationship between a capacity to retain propositional knowledge of literacy, and understanding and/or intelligence. Some modern understandings of dyslexia and difficulties with literacy acquisition lack such assumptions (see for example, Stanovich, 2005, APA 2013). However, this

assumption that propositional knowledge of literacy, and understanding and/or intelligence are related in some way is an important feature of Lexism. It continues to exist within popular views of dyslexia and folk psychology, and it can be found in association with the worse forms of Lexist prejudices. For example, the *Daily Mail* (Camber 2007, cited in Hickman and Brens, 2014: 336) ran a headline which said 'Dyslexia is just a middle-class way to hide stupidity'. The *Daily Mail* article cites the work of Julian Elliot as its source, though in a rather disingenuous and inaccurate manner; Elliot recognises those with higher academic ability but difficulties in literacy acquisition. The *Daily Mail* article can include such views because it draws on, or arises from, beliefs which exist in folk psychology – namely, that literacy ability and intelligence are synonymous. In this chapter I will seek to demonstrate why this belief is not just empirically incorrect, it is also *conceptually* mistaken. This is significant because this misconception is a common (but not universal) feature of Lexism.

The structure of this chapter is as follows. In the first section, I explain what the intellectualist doctrine is and why it is of such importance to my concept of Lexism. In the second section, I highlight the distinction Ryle makes between knowing *how* (forms of intelligence or understanding not reliant upon propositional knowledge) and knowing *that* (propositional knowledge). I argue why this is of importance in our understanding of literacy and Lexism. In the third section, I apply this distinction to hyperlexics and dyslexics. I use hyperlexics as an object of comparison for dyslexics to highlight that the conceptual boundaries of these definitions rely on a misconception rooted in the intellectualist doctrine. Finally, in the fourth section, I relate my arguments to each of the three aspects of the social model of dyslexia: (1) Othering and discrimination, (2) the influence of social and

historical factors in defining the disability (as socially constructed) and (3) dyslexia as impairment.

### **(10.1) The intellectualist doctrine**

In this section I provide an explanation of what the intellectualist doctrine is and why it is important to Lexism. As I note in Chapter 6, Riddick (2001: 229) argues that there is an ‘implicit assumption’ that ‘scholarship or deep thought is incompatible with poor spelling.’ Ryle (1949) critiques this sort of conceptual confusion, where propositional knowledge is confused with ‘deep’ or original thought. I argue that this conceptual confusion is a feature of Lexism. I begin by briefly outlining other philosophers’ views of Ryle’s work on the ‘intellectualist doctrine’, specifically the distinction between knowing how and knowing that. I do so because there seems to be some confusion on Ryle’s text. I outline what Ryle himself says the ‘intellectualist doctrine’ is. I go on to note the problems that Ryle highlights within the ‘intellectualist doctrine’; principally, the conflating or confusing of propositional knowledge with different forms of intelligence. Propositional knowledge may relate to, enhance or be required to demonstrate different forms of intelligence or understanding, but understanding and intelligence in and of themselves are not reliant upon propositional knowledge. We can include originality of thought (for example) the creation of new propositional knowledge within Ryle’s concept of knowing how. Knowing how can therefore be the parent of knowing that.

Previous literature on Ryle has introduced an element of confusion in how to interpret his work. This has to be acknowledged but cleared away before we can proceed. Stanley and Williamson (2001) argue that Ryle is making an artificial and misguided distinction between different forms of propositional knowledge.

Stanley and Williamson (2001) choose to disagree with Ryle on an epistemological distinction that Sax (2010) argues a more careful reading of his text would reveal he did not in fact make; other authors in this area appear too put forward arguments similar to Sax (see for example Toribio, 2008, Wallis, 2008, and Chung-Hung, 2011). My own position is closest to that of Sax (2010) in that Ryle is not concerned with epistemological matters here; he is drawing a distinction between *understanding* and *knowing*. Ryle's work is as an explanatory device; he is merely pointing out that we cannot *reduce* intelligence to knowing that (propositional knowledge). That is not to say the two might not relate to one another; as Winch (2010) notes, Ryle's examples tend to be that of practicing a skill with intelligence. Propositional knowledge might be an aspect of practicing a skill but it is not the whole of it; in the same way remembering propositional knowledge is not the same as understanding that knowledge. To crudely reduce intelligence to propositional knowledge is the 'intellectualist doctrine'; and this should be avoided.

Ryle (1949; 27) identifies the 'intellectualist doctrine' as the mistaken belief that: when 'we speak of the intellect or, better, of the intellectual powers and performances of persons, we are referring primarily to the special class of operations which constitute theorizing'. Furthermore, the 'goal of these operations is the knowledge of true propositions or facts' (Ryle, 1949: 27). Propositional knowledge, or 'true propositions' would include simple 'basic' factual information on how a word is spelt or pronounced, for example. Such propositional knowledge, if one assumes it *has* to accompany intelligence (or intelligence will indicate a capacity for propositional knowledge), is a form of the 'intellectualist doctrine'. Ryle (1949: 27) argues that the 'early theorists' (he does not clarify who) 'were predisposed to find that it was in the capacity for rigorous theory that lay the



superiority of men over animals, of civilised men over barbarians.’ This concept of superiority is important in the Othering of dyslexics; we have inherited the concept that to attain and grasp propositional knowledge is ‘the defining property of a mind’ (Ryle, 1949: 27). To clarify my position and that of Ryle, I set out the principal aspects of the intellectualist doctrine and Lexism in the table below.

**Table 10.1 Aspects of the intellectualist doctrine and Lexism**

<b>Intellectualist doctrine (Ryle, 1949)</b>	<b>Lexism</b>
A conceptual confusion, by which the importance of propositional knowledge <i>generally</i> is exaggerated, conflated and confused with intelligence.	A conceptual confusion, by which the importance of propositional knowledge <i>of literacy</i> is exaggerated, conflated and confused with intelligence.
A perceived ‘rule’ that propositional knowledge <i>directly relates to</i> intelligence.	Exceptions to the perceived rule require an explanation, <i>dyslexia</i> . The purposes of which are to justify and maintain the ‘rule’.
Creates normative criteria (based on a capacity for propositional knowledge) by which some are defined as intellectually superior and others intellectual inferior, for which there are no perceived exceptions.	Creates normative criteria (based on a capacity for propositional knowledge <i>of literacy</i> ) by which some are defined as intellectually ‘ <i>normal</i> ’ (and inferred to be superior) and others ‘ <i>abnormal</i> ’ or ‘ <i>impaired</i> ’ (and inferred to be inferior).
Evident in our cultural heritage.	Evident in our cultural heritage. (see for example McPhial and Freedman 2005, Campbell 2011, 2013).

Table 10.1, above, clarifies my position; that the tendency to assume that a capacity for propositional knowledge of literacy accompanies intelligence, and vice versa. This is a feature of Lexism. Dyslexics form an obvious exception to this ‘rule’, and as such, require an explanation. This apparent rule, however, is a conceptual confusion; there is no strange contradiction that needs explaining. Mainstream society, however, appears to assume that there is a contradiction. Furthermore, psychologists on occasion appear to do the same; consider again Stanovich’s (2005) criticisms of the ‘discrepancy assumption’. That is, the belief

that there is a discrepancy between difficulties with literacy and intelligence which requires explanation (see for example, APA, 2013). Stanovich (2005) notes, that there is no correlation between IQ and the difficulties associated with dyslexia. What Stanovich is criticising, I would suggest, is a form of the intellectualist doctrine. Therefore I argue that the intellectualist doctrine is an important aspect of Lexism.

Ryle's (1949: 27) critique of the intellectualist doctrine is that 'theorising is one practice amongst others and is itself intelligently or stupidly conducted.' Ryle (1949: 26) suggests that intelligence is a 'family of concepts' and that it is 'of first rate importance to notice that stupidity is not the same as ignorance.' The 'intellectualist doctrine' is over simplistic, as there are many cases one can think of where there are no set criteria, maxims or rules, such as someone telling a joke well. He points out that one can argue convincingly without recourse to Aristotle's rules of correct reasoning, indeed it was *the experience* of good reasoning that led Aristotle to discern the common features of good reasoning, and to enable him to *compile* his 'rules'. Knowing how, can therefore, proceed and assist in the creation of knowing that, contrary to the 'intellectualist doctrine'. Ryle (1949: 28-29) notes, in the case of students, that: 'we are interested less in the stocks of truths that they acquire and retain than in their capacities to find out truths for themselves and their ability to organise and exploit them, when discovered'. In Higher Education the difference between 'descriptive' writing and 'critical analysis' reflects this distinction. The capacity for students to 'find out truths for themselves', is an aspect of original thought, of the ability to demonstrate understanding not merely repeat or describe facts or other people's interpretations read in a textbook. Ryle suggests that these differences in mental capacities are the differences between knowing how and knowing that.

## **(10.2) Knowing how, Knowing that and literacy**

Within this section I elaborate on the distinction between knowing how and knowing that further and apply those distinctions to how we might understand literacy. I provide two matrices: one which outlines the aspects of these two distinctions and a second to show how they can be applied to literacy. I argue that normative assumptions of literacy, based on the intellectualist doctrine, lead to a perception of some strange contradiction between dyslexics' intelligence and their ability to engage with rote learning aspects of literacy. However, this is a conceptual confusion; it fails to distinguish aspects of literacy associated with knowing how from aspects associated with knowing that. Aspects of literacy, especially those to do with rote learning, such as correct spelling and reading (in the sense of recognising the letter sound relationships) may be thought of as knowing that. Dyslexics can be thought of as having a weaker capacity for knowing that compared with non-dyslexics, yet an equal capacity for knowing how.

Ryle (1949: 53 and 46) argues that 'understanding' is part of knowing how, likewise that to argue intelligently is also knowing how. Constructing a well-reasoned argument from the reading of a text is not reliant on knowing that (though knowing that might assist you to do so); one must engage with creating a text (knowing how) otherwise one would be just copying or rewriting another text from memory. Verbal comprehension (understanding) does require a good vocabulary: one must know what a word means (knowing that), yet, how each word combines with another to give a particular meaning in the context of the utterance is reliant upon one's ability to understand something which may be unique (knowing how). Knowing that is established knowledge which can be repeated and by its very nature is not creative. Knowing how can be creative but

this does not mean it might not require knowing that. Ryle gives the example of chess; that knowing the rules of chess by rote is propositional knowledge. Ryle points out that this does not mean that you know how to play chess as well as a chess champion; that would be knowing how. The chess champion will have a propositional knowledge of chess which might be the same as you; the deciding factor is who *knows how* to play chess better. Significant aspects of intelligence are *not reliant* on propositional knowledge.

Ryle (1949: 28) argues knowing that is ‘the knowledge, or ignorance, of this or that truth’ what he means by this is things such as the boiling point of water, the capital of Britain is London, and so on. He is suitably cautious; that there is an area where one’s performance of knowing how is reliant on knowing certain known criteria. Ryle (1949: 29, emphasis in original) argues that those who favour the ‘intellectualist doctrine’ or ‘legend’ ‘try to reassimilate knowing *how* to knowing *that* by arguing that intelligent performance involves the observance of rules, or the application of criteria.’ I argue that greater emphasis on aspects of knowing that within models of literacy is problematic; it is an assumption that literacy in terms of its aspects of knowing that *determines* intelligence and understanding. Ryle’s distinction is a useful explanatory device by which to consider normative literacy which conflates intelligence with propositional knowledge. The below matrices provide a clarification of Ryle’s argument (Table 10.2) and my application of his argument with regards to literacy (Table 10.3).

**Table 10.2 knowing how and knowing that compared**

<b>Aspects of knowing how</b>	<b>Aspects of knowing that</b>
Rules of secondary importance	Rules of primary importance
Facts of secondary importance	Facts of primary importance
Originality of thought of primary importance	No originality of thought
Engaged in knowledge creation	Remembering what is already known
Ability to respond to specific context	Context of secondary importance
Does not require rote learning	May require rote learning

**Table 10.3 Aspects of the knowing that or knowing how of literacy**

<b>Aspects of Literacy</b>	<b>knowing that or knowing how</b>
Spelling irregular words	knowing that
Spelling regular words phonetically	knowing how
Alphabetic sequencing	knowing that
Early stages of reading (letter sound combinations)	knowing that
Later stages of reading (ability to apply context to meaning)	knowing how
Rote application of grammar and punctuation.	knowing that
Intelligent application of grammar, punctuation if the rules are unclear.	knowing how

Ryle made an important and useful distinction between knowing how and knowing that. Furthermore we can apply this distinction to our understanding of literacy. As I argue in Chapter 5, the DSM IV and V (APA, 1994, 2013) and the ICD-10 (WHO, 1994) definitions of equivalent terms to dyslexia have conceptual foundations reliant upon the discrepancy between literacy ability, and intelligence. This discrepancy, it is assumed, requires an explanation, this is an inferred acceptance of the intellectualist doctrine. I argue that the majority of the features of literacy, especially those which dyslexics find difficult, are aspects associated with knowing that such as spelling an irregular word correctly. Yet there are significant features of intelligence which Ryle classed as knowing how; aspects of intelligence which dyslexics do not struggle with. I argue, therefore, that the DSM IV and V,

and ICD-10 definitions are indicative of the authors of those documents confusing or conflating knowing how with knowing that. The purpose of this section is to emphasise the relevance of the knowing how and knowing that distinction for how we think about propositional knowledge of literacy. This confusion relates to normative literacy and how the concepts of dyslexic and non-dyslexic are employed.

### **(10.3) Hyperlexics as an Object of comparison**

Within this section I use hyperlexics as an object of comparison for dyslexics. I apply the distinction of knowing how and knowing that to hyperlexics and dyslexics in order to highlight that the conceptual boundaries of these definitions rely on a misconception rooted in the intellectualist doctrine. In this object of comparison I also use non-dyslexic readers ('normal readers') and those of overall low ability to clarify my argument further. I argue that non-dyslexics are readers who meet social expectations of literacy and have comparable capacities in knowing how and knowing that. Those of 'overall low ability' also have comparable capacities in knowing how and knowing that, and conform to the expectations of the intellectualist doctrine. Dyslexics and hyperlexics, in contrast, have uneven capacities in knowing how and knowing that which do not conform to the expectations of the intellectualist doctrine. I begin by setting out the difference between 'dyslexia' and 'hyperlexia'; in Table 10.4 I provide a clarification of my argument. I provide explanations of how non-dyslexics, dyslexics and hyperlexics can be understood in relation to the knowing how and knowing that distinction that Ryle highlights.

I begin by contrasting the concepts of dyslexia and hyperlexia. Hyperlexia, for the sake of my argument, follows Joshi et al's (2010) description. The very

loose definition of dyslexia I use, for the sake of argument, is that of the DSM IV and V, and ICD-10 equivalent terms which I discuss in Chapter 5. The psychological literature often defines those ‘with dyslexia’ as having average or above average verbal comprehension but weaker working memory and difficulty with aspects of literacy, especially rote learning (see for example Miles and Miles, 1999, Rice with Brooks, 2004). Those ‘with dyslexia’ have limited ability in decoding printed text into its sounds, but can have a verbal comprehension of language which is average or higher than average. Those with hyperlexia have average or above average ability in decoding printed text into its sounds, however, their verbal comprehension of language is significantly below average (Joshi et al 2010). In contrast, I argue that these ‘disorders’ are conceptual confusions; I clarify my argument below in Table 10.4, I then argue for why this object of comparison is of value.

**Table 10.4 Dyslexics and Hyperlexics compared**

<b>Aspects of intellectualist doctrine</b>	<b>Dyslexics</b>	<b>Hyperlexics</b>	<b>Non-dyslexic ('Normal Reader')</b>	<b>'Overall low ability'</b>
<i>Knowing how:</i> original thought and engaging in tasks intelligently.	Average or above average	Below average	Average or above average	Below average
<i>Knowing that:</i> propositional knowledge of literacy.	Below average	Average or above average	Average or above average	Below average

If one rejects the intellectualist doctrine, dyslexics, are not strange or mysterious exceptions to a ‘rule’. As I set out in Table 10.4, a dyslexic, I suggest, has relative to a hyperlexic, a stronger capacity for knowing how but a weaker capacity of the knowing that aspects of literacy. Yet it is important to note that

there is no hard, fast or clear distinction between dyslexics, 'normal readers' (non-dyslexics) and hyperlexics, rather that they share a *range* of different capabilities of the 'knowing how' and the 'knowing that' aspects of literacy. Non-dyslexic readers are those with a more even distribution of capabilities across both the knowing how and knowing that (as I set out Table 10.4). Those of 'overall low ability' also have an even or comparable capacity for knowing how and knowing that, and likewise fit within the normative expectations of literacy. Non-dyslexic readers, on occasion, are referred to as 'normal readers'. Both McPhail and Freedman (2005) and Campbell (2013) argue that in ascribing the average or non-dyslexic reader as 'normal', the average is used as a vehicle of normativity; it is an expression of normative expectations. Street (1993) and Payne (2006) argue that psychologists on occasion raise, reinforce and replicate this form of normative literacy. As dyslexics and hyperlexics are being defined against a numerical average on a psychological test, the non-dyslexic (as the average), is therefore actually defined by the reading scores and test results of dyslexics and hyperlexics, who contribute to the total from which the average is calculated. Ironically, therefore, the non-dyslexic (perceived as 'normal') is reliant upon the 'abnormal' dyslexic or hyperlexic to calculate the average from which the 'norm' is seen to exist.

In perceiving a mysterious *thing* called 'dyslexia', we confuse knowing how (such as understanding, original thought, intelligent use of criteria) with knowing that (rote learning or propositional aspects of literacy). This confusion of knowing how with knowing that is an important normative assumption of literacy. As such, individuals exist who do not meet this assumption, as empirical evidence on the difficulties of dyslexics and hyperlexics demonstrates. Therefore there are two possibilities. First, that our original view of literacy and its relationship to



intelligence is indeed universally applicable (an acceptance of the intellectualist doctrine). Subsequently, to explain the cases of dyslexics and hyperlexics, we construct complex pathologies to explain their existence whilst making the average a *biological* 'norm'. This logic, however, is somewhat tenuous and if we apply Occam's razor; an unnecessarily complex solution. The second is simpler and more logical; that our original view of literacy is mistaken: so, there are no complex pathologies to explain the existence of dyslexics and hyperlexics (a rejection of the intellectualist doctrine). Rather, to maintain our view of literacy, we are creating unnecessary theories to fit our preconceptions. There is no impairment we might call dyslexia; to do so is an acceptance of the intellectualist doctrine and confuses propositional knowledge with intelligence.

#### **(10.4) The three Aspects reconsidered**

Within this section I reconsider the three aspects of the social model of dyslexia: (1) Othering and discrimination, (2) the influence of social and historical factors and (3) dyslexia as impairment. I argue that the intellectualist doctrine is directly related to all three aspects of Riddick's model. I begin by considering the relationship between aspect 1 and aspect 3. I argue that the misconception of impairment (aspect 3) arises from a failure to distinguish between knowing how and knowing that (the intellectualist doctrine). This in turn leads to dyslexics being Othered and discriminated against (aspect 1). Normative beliefs of literacy are aspects of the intellectualist doctrine embedded within our cultural heritage (aspect 2). Our conceptions and misconceptions of dyslexia and literacy are therefore intimately bound up with the intellectualist doctrine. My purpose in this section is to emphasise that Riddick is aware of some of the consequences of the intellectualist doctrine, though not all. Furthermore, her assertion that impairment is distinct from

'cultural factors' is problematic, and lacks an awareness of Ryle's conceptual distinction of knowing how and knowing that.

The intellectualist doctrine is the failure to distinguish between aspects of intelligence and propositional knowledge; I argue that it is this which leads to both Othering and the concept of impairment. In the case of dyslexia, this is to conflate propositional knowledge of literacy (such as spelling and grammar) with original thought and intelligent following of criteria. In so doing, those who are intelligent yet have difficulties with literacy appear as mysterious exceptions to the rule of the intellectualist doctrine. Likewise, those who appear to lack intellectual abilities yet are still 'literate', are seen also as strange or requiring explanation. The terms dyslexia and hyperlexia are applied respectively; in doing so, there is an inferred acceptance of the intellectualist doctrine. If one rejects the intellectualist doctrine, as Ryle and I do, there is nothing to explain. Riddick, in accepting the concept of impairment, is therefore inferring an acceptance of the intellectualist doctrine. The intellectualist doctrine, as Ryle (1949: 27) notes, includes the misconception of 'the superiority of ....civilised men over barbarians'; that is, the superiority of the literate over the less literate or non-literate. Lexism and the intellectualist doctrine include concepts of the superiority of those with a capacity for propositional knowledge (see Table 10.4).

Riddick (2001) rightly emphasises the importance of 'cultural factors' (aspect 2) influencing the extent to which a dyslexic is disabled. However, we can discern the intellectualist doctrine within these social and historical factors. As Ryle (1949) argues, the intellectualist doctrine is espoused to justify concepts of superiority. In the case of Lexism, literacy has long associations within classical texts with civilisation, full 'humanness', morality and intelligence (see for example

Bowman and Wolf 1994, Millender 2001, and Draper 2004). Furthermore, written laws (*Lex* in Latin) are seen to distinguish the civilised from the barbarous in antiquity (Wormald 1977). These classical concepts are reinforced in western culture during the eighteenth and nineteenth centuries within imperialistic agendas and beliefs (Pagden, 2001). During the late nineteenth century and early twentieth century, a period when eugenics was a popular concept, the British government sought to control and limit the 'feeble-minded' within its population (Thompson 1998). Bennison (1987), Franklin (1994) and Baker (2002) all argue that the concept of the 'feeble-minded' includes dyslexics. During the late nineteenth century, dyslexics were seen as abnormal and barbarous; non-dyslexics as normal and civilised (McPhail and Freedman 2005). Dyslexics are seen as inferior, impaired and abnormal because of these historical factors, but one should note the similarity with features of the intellectualist doctrine.<sup>14</sup>

Campbell (2011, 2013) emphasises that the historical role of normative beliefs in developing educational policy which Others dyslexics. This is an unconscious process, a process which appears to adopt or accept the intellectualist doctrine at some level. As Street (1984, 1993) argues, those who adopt the autonomous model of literacy believe there to be a 'great divide' between the literate and the less literate or non-literate. I suggest that this model of literacy infers an acceptance of the intellectualist doctrine. In contrast, I adopt the opposing model of literacy: the ideological model of literacy. The ideological model of literacy is compatible with a rejection of the intellectualist doctrine and, therefore, also a rejection of dyslexia as impairment. I argue that the autonomous

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<sup>14</sup> Campbell (2013) notes the work of the American psychologist, Rutherford, a eugenicist, in the early 1900s who associates dyslexia with stupidity, inbreeding and loose morals. Rutherford (1909: 487, cited in Campbell 2013: 132), considers dyslexics to be 'a reversion to the pre-civilised type'.

model of literacy and the intellectualist doctrine are part of the beliefs of the political elite. The perceived 'norm' by which dyslexics are judged abnormal, or impaired, is, therefore, one reliant upon the conceptual foundations of the autonomous model of literacy and the intellectualist doctrine. Dyslexia (as a normative theory) exists, I argue, to recognise the intelligence of dyslexics but maintain and reinforce the existing normative beliefs about literacy.

As I argued in Chapter 7 the autonomous model of literacy is an important aspect of Lexism. I would suggest that the autonomous model of literacy is compatible with the intellectualist doctrine; both make similar assumptions about propositional aspects of literacy. For this reason, we might argue (if we so choose) that policy makers (who are influenced by the autonomous model of literacy) accept and reinforce the autonomous model of literacy because they have fallen into the 'trap', so to speak, of the intellectualist doctrine. The intellectualist doctrine is a belief which exists within social and cultural factors that impact on the disabling of dyslexics (aspect 2 of Riddick's model). I argue in Chapter 8, that historical aspects are significant in who is, and is not, said to be dyslexic, and that this has a direct relationship mistakenly believing in dyslexia as impairment (aspect 3).

## **Conclusion**

Within this chapter I emphasised the importance of the intellectualist doctrine. I explained my interpretation of Ryle's concept, drawing on Ryle's own critique and explanation of the intellectualist doctrine. I emphasised the importance of the distinction between original thought and intelligent application of criteria (knowing how), as opposed to propositional knowledge (knowing that). I argued that this is important for how we view literacy and intelligence, it influences the

construction of normative criteria of literacy by which dyslexics are judged abnormal or impaired. I argued that the intellectualist doctrine has led to the need to explain those who are the empirical exceptions to a perceived rule that capacity with literacy accompanies intelligence. Within the object of comparison, I included dyslexics, hyperlexics, non-dyslexics and those of 'overall lower ability'. I suggested that the intellectualist doctrine is embedded in our cultural heritage, and a consequence of this is the Othering of dyslexics as impaired. In this chapter, I argued that someone forewarned of the intellectualist doctrine, as critiqued by Ryle, is able to see that the concept of impairment is a form of Othering. Those who adhere to the intellectualist doctrine presume that those with a capacity for propositional knowledge are superior, and so, those who lack this capacity are inferior (i.e. 'impaired').

## **Part 2: Summary**

In Part 2, I rejected Riddick's social model. I acknowledge that the first two aspects of Riddick's model, Othering and discrimination, and 'cultural' factors are convincing. However, their very strength leads one to the conclusion that the third aspect of Riddick's model, dyslexia as impairment, is unconvincing. In Chapter 6, I questioned Riddick's use of 'impairment' and identified the three key aspects of her model. In Chapter 7, I put forward the thought experiment, 'The Twins'. I did so to reject the belief that there is a clear distinction between a disability and impairment. I also assessed the evidence for the Othering and discrimination of dyslexics and placed this in the context of the sub-disciplines of Policy Archaeology and New Literacy Studies. In Chapter 8, I critiqued the temporal problem of dyslexia, using the thought experiment Three Men and a Time Machine. In doing so I rejected the concept of dyslexia as an impairment with a single aetiology. In Chapter 9, I rejected dyslexia as impairment based on both a single aetiology and function, by using the Cannae Rememberers thought experiment, and existing academic literature on dyslexia. In Chapter 10, I utilised Ryle's critique of the intellectualist doctrine to undermine the conception that literacy leads to understanding. I employed hyperlexics as an object of comparison for dyslexics, to clarify that we should not confuse understanding (knowing how) with propositional knowledge of literacy (knowing that). In rejecting Riddick's model, important features of Lexism have begun to emerge in relief, which will be examined in the remaining chapters.

### **Part 3: Conceptions of Lexism**

In Part 3 I set out Lexism as an alternative to the social model of dyslexia that I have critiqued in Part 2. In each chapter of Part 3, I provide different ways of seeing Lexism, different conceptions which allow us to perceive some of Lexism's key features. I am not making empirical claims in these chapters, rather I wish to illustrate how we might rethink information we already have on dyslexia and being dyslexic. Inevitably this means that these chapters are speculative, providing a broad impression of how we might *begin* to think about Lexism. As Lexism is highly sensitive to context, I am not offering categorical definitions of Lexism, but rather different viewpoints, in different contexts, of beliefs and social practices we might class as Lexism. Consider for a moment a world in which racism was present but the concept of racism had not been articulated. If someone then created the *concept* of racism, and sought to explain racism as a concept to others, categorical definitions would be unhelpful. They could only map out broad features, such as beliefs, practices and forms of discrimination. Likewise, in these four chapters I set out what are examples of how we might conceptualise Lexism, many other examples are possible, I have merely selected indicative examples.

In Chapter 11, I highlight Lexism's philosophical aspects: conceptual confusions, as well as the ontological and theoretical explanations. I divide ontological and theoretical aspects further into scientific, educational and folk psychology-based explanations. In Chapter 12, I examine Lexism's societal aspects. I classify those aspects under four broad headings: socio-historical context; government and bureaucratic reactions; practical and ideological aspects of literacy practices; the social consequences for dyslexics. In Chapter 13, I employ two different objects of comparison (Oralism and drepetomania) as

examples of possible ways of seeing Lexism. I then apply one of those objects of comparison (Oralism) to one recent policy development. In Chapter 14, I provide an extended object of comparison for Lexism - Said's (1978) critique of Orientalism. I do so to highlight another way of viewing Lexism which is notably different to that suggested in chapters 11,12 and 13. I suggest that there are potentially many different conceptions of Lexism which can coexist.



## **Chapter 11 The Philosophical aspects of Lexism**

### **Introduction**

The focus of this chapter is my classification of Lexism's philosophical aspects that is those aspects which are primarily conceptual in nature. The philosophical aspects of Lexism, I suggest, are not necessary and conjointly sufficient conditions. Those features include conceptual confusions, as well as the ontological and theoretical explanations that are articulated to justify or replicate normative literacy. The ontological and theoretical explanations I subdivide into: (i) scientific; (ii) educational; (iii) folk psychology. However, I suggest those ontological and theoretical explanations can be competing and rival conceptions of literacy, dyslexia and being dyslexic. Though one can point to similarities in those conceptions, one can also point to dissimilarities. I argue that those aspects of Lexism are what Wittgenstein (PI § 67) calls 'family resemblances'.

Lexism can be thought of as a complex set of normative practices, actions, assumptions and beliefs. Lexism is not a *phenomenon*, but rather a term for a type of phenomena. Lexism has a number of forms. Blatant prejudice ala the *Daily Mail* (see for example Cowper, 2007 cited in Hickman and Brens 2014), is Lexism at its most obvious. Though such a position rejects the concept of dyslexia, it adopts a worse position – namely, the refusal to recognise the existence of the intellectual able but less literate. In so doing a Lexist of this type adopts a position situated in folk psychology, and as a child, this is a form of Lexism that I experienced regularly. Educational practices and academic positions, however, have on occasion, aspects of Lexism embedded in them. An example might be neuro-scientific research focused on dyslexia as something in the brain (see for example, Langer et al 2015, Im et al 2016, Ozernov-Palchik and Gaab 2016a, 2016b). This

conceptual confusion can lead one to a Lexist position; discrimination and Othering through a medicalising discourse; yet the intention of such research may be benign.

The structure of this chapter is as follows: in the first section, I explain why I do not provide a straightforward definition of Lexism. In the second section, I explain the conceptual confusion within Lexism, the misconceptions and normative assumptions of literacy. These are, I suggest, influenced by essentialist conceptions of literacy; that literacy is a simple and easily defined capacity. In the third section, I consider scientific aspects of Lexism, both ontological and theoretical. In the fourth section, I explore the educational aspects of Lexism, both ontological and theoretical. In the fifth section, I highlight folk psychology as a prejudice not based on evidence, an anti-intellectual form of Lexism. The philosophical aspects of Lexism, I summarize and clarify, in the below table.

**Table 11.1 Philosophical aspects**

<b>Classification</b>	<b>Aspects of Lexism</b>
Conceptual confusions <i>Essentialist misconceptions of literacy.</i>	The conflation of literacy and intelligence. Treating literacy as a simple unit rather than a complex spectrum of capabilities. Unrealistic normative expectations of full or total literacy.
Ontological Explanations <i>How or if dyslexics are said to exist.</i>	<i>Scientific:</i> dyslexia exists as a psycho-medical impairment therefore dyslexics exist. <i>Educational:</i> dyslexia does not exist therefore those with intelligence who fail to meet norms of literacy exist due to 'teaching deficits'. <i>Folk psychology;</i> neither dyslexia nor dyslexics exist: 'dyslexics' are just stupid and lazy.
Theoretical Explanations <i>Basis of the explanations for the existence or non-existence of dyslexics.</i>	<i>Scientific:</i> Psychological and Neuro-scientific explanations located within the brain of the individual. <i>Educational:</i> explanations based on teaching systems <i>Folk psychology;</i> anti-intellectual, based on no evidence.

The philosophical aspects of Lexism are founded on a number of conceptual confusions which lead to Ontological questions about how, or, if dyslexics might be said to exist. Such Ontological questions in turn lead to the proposing of theories to explain why dyslexics do, or, do not exist. First, an ontological and theoretical explanation which relies on a scientific foundation; dyslexia exists as a psycho-medical impairment which can be located in the brain of all dyslexics. Second, an educational foundation, based on systems and practices within education and reliant on an unrealistic or over simplified view of literacy. This leads some to reject the concept of dyslexia (for example, Lopes, 2012), such writers may believe instead in a 'teaching deficit'. This implies a subtle form of Lexism, for it suggests that if intelligent children were taught in the correct manner (whatever that is said to be) they would have less difficulty with literacy. Third, a view based on folk psychology, neither dyslexics nor dyslexia exist; 'dyslexia' is an excuse for the stupid and/or lazy. This ontological position is anti-intellectual, and not found in the theoretical academic literature; as such it ignores evidence and rational arguments. A position based in folk psychology insists that 'dyslexic' is merely a 'politically correct term' for the less able. I examine each of these three features of Lexism in turn.

### **(11.1) Lexism and family resemblances**

Someone at this point might ask why I give no definition of Lexism. At least, (someone might suggest) I could provide a rough definition by which to navigate our understanding of the term beyond Lexism being just 'normative practices or assumptions of literacy that Other and discriminate' against dyslexics. However, I suggest that any definition based on necessary and sufficient conditions, beyond this very simple one, would lead to misunderstanding and

conceptual confusion; specifically, a *narrow* view of Lexism, whereas Lexism should be seen as a *broad* concept. Lexism is sensitive to changes in circumstances, it is occasion sensitive. As such, one cannot have occasion insensitive criteria (necessary and sufficient conditions) which are relevant for all conditions and cases. Lexism (I suggest) should be viewed as a 'family resemblance' concept, and as such it is not dependent on a definition at all; indeed if Lexism is a family resemblance concept, to provide a definition is to provide a false or misleading definition.

Winch (1998: 110) summarized how we can understand Wittgenstein's term 'family resemblances' thus:

Many concepts are neither acquired by using definitions nor do they depend on definitions for their use. Their meaning is to some extent context dependant and consist of a series of overlapping common features, none of which cover the whole range of usages of the concept.

If Lexism is a family resemblance concept, I can provide examples of its meaning in context, and examples of a 'series of overlapping common features'. I cannot, however, provide a definition. As none of these common features 'cover the whole range of usages of the concept' one could not give a definition in any logical or coherent sense. As Winch (1998: 103, empathise in original) notes:

Much of the difficulty relates to the fact that many concepts are best seen as *family resemblances*. They are not susceptible to a ready definition and are not used in accordance with definitions. Instead, they are arrays of overlapping similarities in usage whose identification and successful use is often dependant on context. And there will be variations in the application of the concepts according to different languages and cultures.

As I suggest, Lexism is just such a concept - it is 'not susceptible to a ready definition' and cannot be used in accordance with a definition.

The 'arrays of overlapping similarities' within the meaning of its use are 'dependant on context'. I will therefore only provide examples of how we might use the term, and point out 'overlapping common features' or similarities. In Chapter 2,

I provided a number of examples of Lexism as prejudice, or social attitudes and practices. In this chapter I outline several 'overlapping common features', but no overall definition. Here I provide several more examples of how we might use the term Lexism and point to similarities and differences, and emphasise that this is a family resemblance concept.

Example 1: a dyslexic adult is called 'an idiot' by a work colleague because she misspells a number of words in handwritten notes. In this example we can point to prejudice, hostility and an act of Othering. This arises from an aspect of Lexism related to folk psychology; a conflation of intelligence with a capacity to spell. We might suggest that the dyslexic's work colleague assumes a nomological relationship between spelling and intelligence, whereas in reality there is no such relationship, only the normative presumption of such a relationship within our folk psychology.

Example 2: a specialised dyslexia teacher gives a talk in which she refers to dyslexics as biologically and neurologically different to non-dyslexics. However, she also emphasises dyslexics' abilities in a number of different fields. In this example there is no prejudice or hostility towards dyslexics, quite the reverse. Yet again we can point to an act of Othering (the expression of the view that dyslexics are biologically and neurologically different to non-dyslexics). Again, we might think of this view as expressing a nomological relationship between literacy and intelligence, rather than a normative one. For the specialised teacher believes that it is necessary to explain why literacy does not equate to intelligence in the case of dyslexics. To do so she draws on genetics or neuro-scientific evidence. In doing so, she assumes that there is some form of nomological relationship between literacy and intelligence; otherwise there would be nothing to require explanation.

Yet consider how *different* (as well as how similar) the first example I gave is to *this* example.

Example 3: imagine someone with a good scientific education who is recruiting someone to work within his firm as an accountant. A highly numerate, competent and well qualified dyslexic accountant applies for the post, yet the firms manager rejects the application *because the applicant is dyslexic*. He does so because he assumes that all dyslexics struggle within office based employment. We can point here to an example of discrimination, but this form of Lexism is not of the type expressed in the first two examples. It is a form of stereotyping, and a reaction to that stereotype. For the sake of argument, let us say that the person with a scientific education accepts the concept of literacy difficulties based on function, and thereby rejects the use of any nomological criteria (any association with intelligence). Furthermore, by implication he recognises the importance of normative criteria, the difficulty to meet social norms in functioning within a society for socially valued purposes. The act we construe as Lexism is the discrimination inherent in rejecting someone's application because they are dyslexic, based on a stereotype of what a dyslexic can or cannot do.

What *definition* of Lexism might cover all three of these occasion sensitive examples? Consider also that I have only given *three* examples; the number of possible scenarios is potentially limitless and any definition would need to be inclusive of all of them, which is unfeasible. Within such a possible definition we could not argue that it is a tendency to adopt an assumption of a nomological relationship between literacy and intelligence. Though this might be true for examples 1 and 2, it is not true for example 3, for the scientifically well-educated individual does not hold such a view. Furthermore, the use of the phrase an 'assumption of a nomological relationship between literacy and intelligence' in fact

*means* something notably *different* in example 1 and example 2. Even when we can draw out a similarity, we cannot assume it is the same in different contexts. Neither could we argue that it is simple hostility and prejudice because this is not true for example 2 and is questionable in example 3. If we did argue that there was prejudice and hostility in *both* examples 1 and 3, again it in fact *means* something notably *different* in example 1 and example 3. The words used to describe the example might be the same but the context of their use is not the same. Nor can we point to an act of discrimination, as in example 3, which is not shown in example 2. If we were to argue that there is 'discrimination' in both example 1 and 3 we could not argue that this word has the *exact same meaning* in both contexts. Nor can we point to just 'Othering', as the same definitional problems would arise.

These examples I suggest show that we should view Lexism as a family resemblance concept. As such, Lexism is 'not susceptible to a ready definition' and has an array of 'overlapping similarities in usage whose identification and successful use is often dependant on context' (Winch, 1998: 103). Beyond saying that Lexism is normative practices or assumptions of literacy that Other and discriminate we can say little to *define* it reliant on necessary and sufficient conditions. The clarity of what the concept Lexism means comes not from a *definition* but from *examples* of its use in context. For the normative practices and assumptions in all three examples are not of the same kind, nor is the Othering or discrimination of the same kind. Within this chapter, and the two that follow, I provide different examples of Lexism in context. It is those examples that *provide the meaning of the concept of Lexism*, not any definition reliant on necessary and sufficient conditions.

## **(11. 2) Conceptual confusion**

The conceptual confusions within Lexism I have addressed in both Part 1 and Part 2 of the thesis. As I argued in Chapter 4 there is a tendency to adopt essentialist misconceptions of literacy. For example, Chomsky attacks Wittgenstein's discussion of reading because he [Chomsky] 'is orientated towards finding a "mental structure" behind a cognitive and normative skill' (Harré and Tissaw, 2005: 90). Such essentialist misconceptions can include conflating literacy with intelligence, treating literacy as a simple unit rather than a complex spectrum of capabilities, and unrealistic normative expectations of full or total literacy (Street, 1984, 1993). Conflating literacy with intelligence, Stanovich (2005) refers to as the 'discrepancy assumption.' I suggested in Chapter 10 that this conflation of literacy with intelligence can be thought of as a form of the intellectualist doctrine and is an important feature of Lexism. Treating literacy as a simple unit, easily acquired, again, could be a form of the intellectualist doctrine. In rejecting literacy as a complex spectrum of capabilities, those who adopt Lexism are also assuming that literacy can be simply defined, what Street (1984) calls, the autonomous model of literacy. Unrealistic normative expectations of full or total literacy can arise from such simplistic views of literacy.

I consider normative assumptions of literacy practice as ahistorical, there is no single form of literacy. Street (1993: 1) argues there is a 'rich cultural variation' in literacy practices and we should 'be wary of assuming a single literacy where we may simply be imposing assumptions derived from our own cultural practice onto other peoples' literacies'. Street is arguing that we need to be cautious in how we view other forms of literacy in other cultures. Likewise, I argue that we should be careful in recognising our normative practices are *not* historical constants. As I argued in Chapter 8 the danger in not being cognisant of this fact is



that we assume there is a biological norm of literacy from which we extrapolate dyslexia as some form of biological flaw. Norms within literacy practices are far more fluid than we might assume, for example, let us consider the practice of reading silently to ourselves. In Paulinus' hagiography of St Ambrose,<sup>15</sup> (*Life of St Ambrose*: 6.3.3), Paulinus notes that Ambrose could read silently to himself, something only worth mentioning in the hagiography because it is deemed so unusual. As Manguel, (1996: 43) notes, Saint Augustine also experienced Ambrose's' silent reading and found it 'sufficiently strange for him to note it in his *Confessions*.' Silent reading was, however, becoming more usual in this period: some in the Church 'became wary of the new trend; in their minds silent reading allowed for daydreaming, for the danger of accidie - the sin of idleness' (Manguel, 1996: 51).

Silent reading for some, at this point in history (the late Roman and early mediaeval period), was, not only highly unusual, it had a negative moral association. The change in normative practice (from reading out loud to silent reading) also provides examples of normative assumptions about that practice. This highlights what Street (1993: 1) calls 'rich cultural variation' and illustrates we should not take *our* literacy practices as universal and historically constant. As I argue in Chapter 1, normative literacy includes the assumption that arbitrarily drawn lines between reading and spelling are appropriate, as well as the assumption that one could or should draw a line at all. The example of silent reading shows how fluid normative literacy can be, that the line between that which is seen as a norm and that which is not is historically fluid. The need for dyslexia as a concept is conceptually compromised because we fail to fully

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<sup>15</sup> St Ambrose was a bishop of Milan, in the late fourth century A.D

recognize the implications of this fluidity within our normative practices and assumptions of literacy.

Another normative assumption of literacy exists within our ordinary, or non-technical, language use. As I argued in Chapter 10, we can, all too easily, confuse understanding or intelligence with the capacity to read or spell. Consider the following phrase that exists in our ordinary language use: 'I had to spell it out for him', as a phrase suggests that to spell is simple and unproblematic. To spell a word out loud, as one would for a child, is a task that does not require understanding as such, it requires the propositional knowledge of how that word is spelt. 'I had to spell it out for him', means, however, that someone *cannot understand* something and requires the simplest of explanations, in other words that person lacks understanding or perhaps intelligence. Let us consider examples of natural and expected pairings in our language: a proud parent praising their daughter, 'she is bright, and reads well for her age', or, a teacher criticising a pupil to a colleague, 'he is struggling with reading, but then again he's not that bright'. However, unexpected pairings might occur, for example: someone might express puzzlement and use the phrases such as: 'she might not be very bright but she can read fine', and 'he might not able to read well, but he is a bright kid'. The first set of phrases which do not imply any contradiction, the second set implies an apparent contradiction or paradox. If such ordinary language use is present, it can reveal certain expectations about how intelligence and literacy relate to one another. As I argue in Chapter 7, dyslexics face Othering in their everyday lives both within educational and vocational settings (see for example, Elliot and Wilson 2008, Evans, 2013, 2014). Burden (2005) provides examples of teachers' use of language in a similar manner as I discuss above. This Othering can occur within how language is used to categorise dyslexics as less able (Evans, 2013, 2014).

The examples of ordinary language use I provide, in and of themselves, need not be examples of Lexism. However, in certain contexts they could be examples of Lexism because they express particular conceptions of literacy, intelligence and ability (see for example, Burden, 2005). Such conceptions reveal a simplistic view of literacy, which conflates intelligence and understanding (being 'bright') with reading, similar to those I set out in Chapter 1, provided by Millender (2001), Gibbon (1776) and Scribner and Cole (1981). The very real danger of such language use is that a misconception arises when we become puzzled and are tempted to say 'he might not be able to read well, but he is a bright kid'. We might be tempted to say 'well he is bright but has difficulty with literacy therefore there must be something wrong with him.' As I argued in Chapter 5, the importance of social functions of literacy can lead all too easily to belief in some form of disorder, as expressed in the WHO's (1994) ICD 10, and the APA's (1994, 2013) DSM IV and V.

Assumptions of literacy as an ahistorical practice, or simple and related to intelligence, are not clarified by existing 'functional' conceptions of literacy. Functional literacy, the practical ability to function in a society, might appear to be a logical foundation. However, as Payne (2006: 228) argues, the measuring of 'functional literacy' is biased by the middle-class literacy-based assumptions of those who designed the criteria in the first instance: 'the researchers' actual measurements of literacy may still be just as rigid and arbitrary an operationalisation as 'absolute literacy.' The conception of literacy as 'absolute' (one either had it or did not have literacy) fell out of favour in the 1960s (Payne, 2006). Yet as Payne (2006: 228) points out, functional literacy as a conception of literacy, is not a great deal more sophisticated than absolute literacy; psychologists raised thresholds of what counted as literacy, and introduced

different levels 'to replace the single fixed cut off point.' The approach of educationalists and psychologists to an understanding of literacy perhaps invites such conceptual confusion. As Street (1993: 1) notes, 'educationalists and psychologists have focused on discrete elements of reading and writing skills, anthropologists and sociolinguists concentrate on literacies - social practices and concepts of reading and writing'. Important questions are: 'who is defining literacy?', and 'who does it benefit?'. As I argue in Chapter 9 (in the Cannae Rememberer thought experiment), we cannot ignore the role of elites, especially academic or scientific elites, because it is those elites who construct scientific explanations in which dyslexia is framed.

### **(11.3) Scientific explanations**

In this section, I examine scientific ontological and theoretical explanations for the existence of dyslexics which are aspects of Lexism. Scientific ontological explanations suggest that dyslexia exists as a psycho-medical impairment, therefore dyslexics exist as individuals who are impaired or have some form of deficit. The impairment or deficit of dyslexia (or similar nomenclature), rely on psychological and neuro-scientific theoretical explanations located within the brain of the individual. In Chapter 4, I argue that seeking explanations within the brain leads to the mereological fallacy. As I argue in Chapter 10, the conceptual confusion of conflating intelligence with aspects of literacy associated with propositional knowledge (the intellectualist doctrine) has important consequences. As I suggest in Chapter 5 scientific explanations, such as those of the DSM IV and V (APA, 1994, 2013) and ICD-10 (WHO, 1994), rely on a discrepancy between ability with literacy and intelligence. However, as I argue in chapters 8 and 9, the concept of dyslexia-as-impairment is reliant on either a single aetiology or multiple realisability; both of which are problematic. As the thought experiment 'Three men

and a time machine' shows (Chapter 8), a single aetiology is problematic; social norms of literacy are not constant over time. I sought to show in the 'Cannae Rememberers' thought experiment (Chapter 9) that multiple realisability is equally problematic because it is elites who define social norms (such as literacy), for their own purposes.

The majority of my thought experiments are, similarly, written to critique and question normative psychological or neurological explanations of dyslexia. Ramus (2004) provides an example of a scientific explanation for the existence of dyslexics to be found in current neuroscience (there are of course many others). He appears to adopt, perhaps unconsciously, the 'intellectualist doctrine'. Ramas (2004: 720) defines dyslexia as 'a mild hereditary neurological disorder that manifests as a persistent difficulty in learning to read in children with otherwise normal intellectual functioning and educational opportunities'. Consider his use of the word 'normal' here. There is an underlying or implied assumption in Ramus' definition that 'normal' intelligence should result in 'normal' reading. Understanding and intelligence become confused or conflated with propositional knowledge of literacy. Scientific explanations might be said to form the current dominant view within Lexism which inform the actions of policy makers. Scientific and political elites, therefore, seem to adopt or infer an acceptance of both the intellectualist doctrine (which I discussed in Chapter 10) and the autonomous model of literacy (as I argued in Chapter 6).

#### **(11.4) Educational foundations**

In this section, I focus on aspects of Lexism that arise from educational ontological and theoretical explanations. A form of Lexism, based on educational systems, might arise if one accepts normative literacy, and that: (i) dyslexia does not exist *but* (ii) those with intelligence who fail to meet norms of literacy *do* exist. If

one is not prepared to question normative literacy (but rejects scientific explanations of dyslexia and prejudices based on folk psychology), then one might adopt explanations based on teaching systems. For example, as Bishop (2014: 383) notes, the authors of the 2010 report (published by Office for Standards in Education, Children's Services and Skills) 'took the view that a primary reason for children's educational failures was inadequate teaching, and that schools were using the terminology of SEN to disguise their limitations and imply the reason for failure lay in the child rather than in poor teaching.' To what extent this is true or an exaggeration is open to question. In the case of dyslexia, the phrase 'teaching deficits' is on occasion used (see, for example, Lopes, 2012), and Elliot and Gibbs (2008) talk of the failure of schools.<sup>16</sup> This is an important minority view, that the intelligent but less literate (dyslexics) exist because of the failure of educational professionals. The problem with this view is that teachers are then made the scapegoats, so to speak, for dyslexics' difficulties with literacy. It is reasonable to question whether one teaching system or method can achieve better results than another. It is *not* Lexist to suggest that teaching practices and the education system have a role in defining or Othering someone as dyslexic, they clearly do. However, to seek to defend, maintain or replicate normative literacy by attacking teachers for failing to meet *unrealistic* or *unachievable* levels of literacy for *all* pupils, I suggest, *is* Lexism.

Graham Stringer MP, in 2009, blamed educationalists for the failure of children to read, and described dyslexia as a 'cruel fiction' (cited in Elliot and Grigorenko, 2014: 1). Teachers here become both victim and perpetrator. Victim, in the sense that it is teachers who are blamed for the failure to meet the demands of policy makers and the general public. Dyslexics are still expected to meet the

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<sup>16</sup> I am not accusing Lopes, Elliot or Gibbs of Lexism, I am using them as examples of a viewpoint which *could* lead to educational Lexism.

same norms of literacy which remain unquestioned. Teachers become perpetrators of Lexism, in the sense that they are expected to maintain or enforce normative practices of literacy. Ontological and theoretical explanations based on education practices may not directly Other dyslexics. However, dyslexics are still discriminated against, with limited access to appropriate means of remediation, or, reasonable adjustment. In this form of Lexism, dyslexics have to be taught in a particular way to resolve their issues, and literacy remains normative and unquestioned. Educational explanations for the existence of dyslexics which reject dyslexia can therefore be a form of Lexism. It is notable that this view is more subtle than either scientific or folk psychology based explanations.

### **(11.5) Folk Psychology**

In this section, I suggest that there is an aspect of Lexism based on folk psychology. Folk psychology, in the specific case of normative literacy, suggests that neither dyslexia nor dyslexics exist, that 'dyslexics' are just stupid and lazy. It is the weakest ontological explanatory account and is not theoretical, as such, but a rejection of both theory and evidence; rather, it is an appeal to commonly held beliefs. This form of Lexism is founded on long standing cultural beliefs that conflate intelligence with a capability for literacy. This is Lexism at its most blatant, ignorant and anti-intellectual. Though not an academic position, this is important in the sense that it is a popular belief before (and indeed after) the existence of the concept of dyslexia or equivalent terms. It is those beliefs that the early investigators into dyslexia rejected; they claimed dyslexia as an impairment as an exception to this perceived truth (Campbell, 2013). However, in doing so, the early investigators still accepted normative assumptions of literacy based on those long standing folk beliefs. 'Dyslexia' was a means to question or challenge folk psychology, such beliefs still exist in the prejudice of those who reject both the

existence of not just of dyslexia, but more importantly, dyslexics. On occasion this includes members of the teaching profession (see, for example, Burden 2005).

Lloyd Thompson wrote on 'reading disability', 'specific language disability' or dyslexia in the late 1960s till the late 1970s. He provides an example of folk psychology, as an aspect of Lexism *before* dyslexia as a concept was widely accepted. Thompson's statement on the reactions to his research into dyslexia during the 1960s is worth quoting at length:

On numerous occasions, the writer has mentioned the problem of reading disability [i.e. dyslexia] in the presence of well-educated people only to be met with negative statements such as, 'Why, anyone can learn to read if he only tries,' or 'Only the feeble-minded can't read.' When the analogy of reading disability to colour-blindness, tone deafness, or physical awkwardness is brought up, these same people shrug their shoulders and say, 'Well, that's different'.  
(Thompson, 1966: xi)

The quotation contains a misconception in those who respond to Lloyd

Thompson's research, that the capacity to read arises from reasoning abilities.

Thompson, in adopting 'reading disability' (dyslexia) as an explanation, is actively challenging ingrained folk beliefs about reading and intelligence. The *current* alternative for dyslexics is to either reject folk psychology as untrue and accept dyslexia, or, be forced to accept those prejudices inherent within folk psychology, to which Thompson is referring.

## **Conclusion**

In this chapter, I outlined my classification of Lexism's philosophical aspects: conceptual confusions; ontological explanations, and theoretical explanations that justify normative literacy. I suggested that the ontological and theoretical explanations both have three forms: scientific, educational and folk psychology. I critiqued Lexism's conceptual confusions, and examined the scientific and educational aspects of Lexism, both ontological and theoretical. I



argued that although folk psychology is a prejudice not based on evidence, it remains an important feature of Lexism. The philosophical aspects of Lexism are not necessary and conjointly sufficient conditions. They are on occasion mutually incompatible, for this reason, and we can call those aspects family resemblances (Wittgenstein, PI § 67).

## **Chapter 12 The Societal features of Lexism**

### **Introduction**

In this chapter I focus on the societal features of Lexism. I classify those societal features under four broad headings: (i) socio-historical context; (ii) government and bureaucratic reactions; (iii) practical and ideological aspects of literacy practices; and (iv) the social consequences for dyslexics. In the first section, I re-examine the social consequences of attitudes towards literacy for the dyslexic minority; and reconsider Riddick's social model in the light of some of Lexism's features assessed in this, and in the previous, chapter. In the second section, I set out my classification of Lexism's societal features. In the third section, I examine the socio-historical context; this includes the role of elites, social structure and the form literacy takes in a given time and place. In the fourth section, I consider governmental and bureaucratic reactions to dyslexics, and argue that these have several important features: ranging from outright rejection to paternalism. In the fifth section, I elucidate the importance of the disjunctions and contradictions between the practical and ideological in forms of literacy.

### **(12.1) Social consequences and Riddick's three aspects**

In this section, I reconsider Riddick's social model of dyslexia to highlight differences of interpretation; I do so by taking into account Lexism's other societal features, from this chapter, and philosophical aspects, from the previous chapter. I first outline what I consider to be the social consequences of normative attitudes towards literacy for the dyslexic minority. I do this briefly as this is an aspect of my position which is, broadly speaking, similar to Riddick's interpretation. I then assess the first aspect of Riddick's model (Othering and discrimination) alongside aspects of Lexism. I consider what Riddick calls 'cultural factors' (Riddick's second

aspects) alongside relevant aspects of Lexism. I reject the concept of impairment (Riddick's third aspect) drawing on both Lexism's philosophical and societal aspects to argue that the concept of impairment is actually a form of Othering (aspect 1). My purpose in this section is to emphasise the value of the first and second aspects of Riddick's model; those are compatible with the societal features of Lexism. I re-emphasise the importance of the intellectualist doctrine as my basis for rejecting the concept of impairment. The principal differences between Riddick's social model and my own view exist within the philosophical aspects of Lexism, as my viewpoint is founded on an understanding of the conceptual, ontological and theoretical features of Lexism. Riddick, in contrast, accepts the concept of impairment although she recognises the prejudice and discrimination faced by dyslexics. I assessed the evidence for the social consequences of Lexism in Chapter 7 when I examined her first aspect, Othering and discrimination in detail.

Riddick's (2000, 2001, 2003) work acknowledges poor educational experiences and social problems faced by dyslexics. Her conclusions are similar to those I suggest for the consequences for dyslexics of societal attitudes towards literacy. Dyslexics can experience stigma, prejudice, hostility or contempt (see, for example, Ferri et al, 1997, Burden, 2005, Madriaga, 2007, Ryan, 2007, Elliot and Wilson, 2008, Evans 2013, 2014). This in turn can result in social alienation, underemployment and high rates of dyslexics among offenders and truants (see, for example, Kirk and Reid, 2001, Svenson et al 2001, Taylor and Walter, 2003, McKay and Neal, 2009, MacDonald, 2009a and b, 2010a and b, 2012). Alienation from education (and indeed teachers) can have a psychological impact on dyslexics who can develop low self-esteem, learned helplessness and long term emotional issues which effect their learning and education (see, for example,

Burden, 2005, and Stack-Cutler et al 2015). Dyslexics also face educational limitations or failure that has nothing to do with practical difficulties of 'dyslexia' (see, for example, Burden, 2005, Madriaga, 2007, Ryan, 2007, Elliot and Wilson, 2008). The question is not whether dyslexics have such experiences, but why? Is it because of a deficit such as dyslexia (regardless of exact nomenclature) or is it, as I suggest, the social consequences of Lexism? I therefore reassess Riddick's social model, taking into account Lexism's other key features.

Othering and discrimination (aspect 1) is integral to both philosophical and societal aspects of Lexism. The conceptual confusions within commonly held views of literacy arise from an acceptance or inferred acceptance of the intellectualist doctrine and the autonomous model of literacy. By perceiving intelligence and literacy as synonymous and normative, dyslexics, as exceptions, require an explanation. As I argue in Chapter 10, this conceptual confusion of conflating intelligence with propositional knowledge of literacy (the intellectualist doctrine) is significant. To what extent this is the starting point for the Othering of dyslexics is open to question. Equally, one might ask to what extent expectations of full or total literacy (as opposed to mass literacy) indirectly lead to the discrimination of those who fail to meet those expectations. Someone who has a normative view of literacy has several ontological and theoretical explanations which they might adopt to explain why dyslexics exist, all of which potentially could result in Othering or discrimination. In contrast to Riddick's model, those factors are not separate from the concept of impairment. I argue that the conceptual confusion leads to both Othering and the misconception of impairment, furthermore, I suggest that those conceptual confusions themselves are products of the socio-historical context.

The 'cultural factors' which Riddick refers to (aspect 2) are most significant within the societal features of Lexism. The intellectualist doctrine, as I argue in Chapter 10, is a key conceptual confusion (a philosophical aspect). However, I would also suggest that it is simultaneously part of our cultural inheritance and the socio-historical context (a societal aspect). The aspects I highlight as societal features, Riddick might choose to recognise, if she so wished, as similar to, or natural developments of, her own model. Indeed, Riddick (2000, 2001, 2003) and MacDonald (2009a and b, 2010a and b, 2012) analyse the social consequences for dyslexics of normative views of literacy. Similarly Riddick (2001) herself acknowledges the importance of official reactions to dyslexics in education, policy and teaching practices as well as the form literacy takes in a given period. The difference between my view and Riddick's is the interpretation of why those normative beliefs of literacy exist and the extent to which they can be questioned. In contrast, I would go further in questioning and challenging normative literacy, and reject the concept of impairment. Cultural factors (aspect 2 of Riddick's model) and the socio-historical context (a classification of societal features) clearly are similar in terms of: social structures, elite group's self-interest, economic demands and norms of literacy in a given time and place.

The key difference between my own concept of Lexism and Riddick's social model of dyslexia is that one rejects and the other accepts dyslexia as an impairment. The societal aspects of Lexism can be interpreted in two possible ways: first, from Riddick's perspective as a social response to the impairment in individuals in particular contexts. However, I argue that these social responses and reactions are the consequences of the philosophical features of Lexism; conceptual confusions held, and ontological and theoretical explanations adopted by, the elite or general population. Philosophical aspects of Lexism underpin and

are interwoven with the societal features; they exist in the explanations of dyslexia that I critique within Part 2. The concept of impairment, arising from conceptual confusion can relate directly to stigma and prejudice, or low self-esteem if dyslexics internalise the concept that they are impaired. Likewise, misconceptions of literacy which leave the norms of literacy unquestioned, can lead one to assume those who are 'singled out' by normative literacy are impaired rather than Othered. The misconception of impairment exists within both the philosophical and societal aspects of Lexism. The divergence between my position and that of Riddick arises from a different interpretation of the impairment of dyslexia. Discerning the philosophical aspects of Lexism enables us to reject the concept of impairment and reassess its societal features.

## **(12.2) Classifications of the societal aspects of Lexism**

Lexism has a number of different societal aspects: I ascribe different *classifications* to these aspects: socio-historical, governmental and bureaucratic, and so on. Those aspects classified under those headings, are 'family resemblances' (Wittgenstein, 2001, PI §67). Wittgenstein shows us that a word can have different uses and meanings which have similarities which overlap and yet also have numerous differences. Likewise, Lexism is potentially a vast and complex concept with a range of 'family resemblances' but for my purposes I focus on those societal aspects of Lexism which are most relevant to the English education system. This classification and description of societal features is simplified, it is *not* a complete description of all Lexism's societal features in all possible cases. The aspects of Lexism I describe have specific natures in this specific context, in other contexts they may have different natures. However, how those societal features might be *classified* may well be broadly *similar*, but not the same in different contexts.

**Table 12.1 Societal Aspects of Lexism**

<b>Classification</b>	<b>Aspects of Lexism</b>
Socio-historical context	Elite self-interest in raising norms of literacy (economic demands for high literacy). Existing social structures: Elite self-interest in maintaining of the norms of literacy. The given technology of literacy and norms associated with it in a given period or place.
Governmental and Bureaucratic <i>Official reactions to the existence of dyslexics.</i>	<i>Outright rejections:</i> the refusal to recognise or make adjustment for the existence of dyslexics in a non-dyslexic society. <i>Government Policies;</i> on SEN, Education, Literacy aimed at full or total literacy. <i>Teaching practices;</i> in SEN and literacy aimed at full or total literacy. <i>Paternalism;</i> disability hand-outs to assist the meeting of normative assumptions and practices of literacy.
Normative expectations associated with literacy <i>The disjunction between the practical and ideological in the technology of literacy at any given point in history.</i>	<i>Conservative normative expectancies and practices of literacy:</i> Adherence to out of date technological models of print-based literacy. <i>Unrealistic expectations</i> associated with that written language; regardless of how regular or irregular the written language is or how well its alphabet is adapted to the spoken language.
Social consequences <i>The social consequences of attitudes towards literacy on the dyslexic minority.</i>	<i>Stigma and prejudice:</i> dyslexic experiences of hostility or contempt. <i>Social alienation:</i> high underemployment, unemployment and high rates of dyslexics among offenders and truants. <i>Psychological impact:</i> low self-esteem, and learned helplessness. <i>Educational limitations or failure</i> that has nothing to do with practical difficulties of 'dyslexia'.

In this chapter, I examine the role of elites (though classified under the socio-historical context) when outlining governmental and bureaucratic reactions to the existence of dyslexics. Elites have an important role, not only in governmental and bureaucratic reactions to the existence of dyslexics, but also in the shaping of dominant discourses which influence normative expectations of literacy, and in the creation of scientific discourse. As Campbell (2013) argued, historically, during the latter half of the nineteenth century European elites were

motivated by self-interest in raising norms of literacy to meet economic demands for a workforce with higher levels of literacy. Campbell (2011, 2013) argues that the development of dyslexia as a concept was intimately linked to these self-interests because dyslexics were viewed as an unproductive part of a potential workforce which could be 'cured' to become productive.

As I argued in previous chapters, elites have an important role within Lexism in how conceptual confusion can arise. In Chapter 4, I proposed a thought experiment (an alternative present) to critique the essentialist view of reading. However, this thought experiment also showed how judgements made by an elite influence what is counted, or not counted, as literacy, and potentially define who is, or is not, defined as dyslexic. In Chapter 5, in a thought experiment called the 'Dyscomputics', I created a similar socially constructed disability to dyslexia to point out the dangers of seeking to explain apparent contradictions in social expectations of intelligence judged against another criteria (such as an ability with computers, or a capacity with literacy). The role of elites in adhering to or maintaining such criteria is significant. In that chapter I critiqued the ICD-10 (WHO) (1994), and DSM IV and V (APA, 1994 and 2013), such documents, one could argue, are the product of professional elites and impose a particular conception of difficulties with meeting social expectations of literacy.

Likewise, in Chapter 8, I put forward a thought experiment, 'Three Men and a Time Machine'. In that thought experiment, I used the example of 'George', someone born in the twenty-fifth century at a time of greater demand for literacy than our own. Traveling to our own time and place (in a time machine) George would *not* be defined as dyslexic. I used George to show how someone might be ascribed a dyslexic identity by the actions of an elite – namely, the higher demands for literacy imposed by that elite on the general population. In Chapter



9, I proposed a thought experiment 'The Cannae Rememberers', the purpose of which was to show how the norms of a particular society determine who is defined as a potential member of that elite and who is deemed inferior or less productive. I argued that the elite in that thought experiment (the 'Rememberers') socially constructed an 'impairment' (the Cannae Remember deficit), a similar concept in some ways to dyslexia.

I would suggest that it would be particularly difficult to separate the role of elites, and elite self-interests from other aspects of Lexism. In Chapter 2, I used hypothetical cases to illustrate what I mean by Lexism. In the hypothetical case of the schoolchild with an iPad, for example, Lexism was evident in school practices dictated by government policy, not in the actions or beliefs of the child's parents and teachers. I used the hypothetical cases of the journalist, the editor and the two politicians to show how members of a given elite can enhance, or replicate Lexism without prejudice or hostility, merely through self-interest. As I set out in the hypothetical cases and thought experiments, there are social consequences of such attitudes towards literacy on the dyslexic minority. The purpose of the thought experiments discussed above, was to show how we might reinterpret the information we already have. Likewise, I am not asserting the aspects set out in table 12.1 as 'facts' but as an alternative way that information we already have may be interpreted. I examine each of those aspects from table 12.1 in turn, to detail a particular conception of Lexism.

### **(12.3) The Socio-historical context and consequences**

In this section, I emphasize that the socio-historical context includes the given norms and the technology of literacy in a given period, but also the role of elites in defining what literacy is. Elites can have self-interests in raising (or maintaining) the norms of literacy for economic reasons, such as demands for

high, or higher, literacy in particular professions (see for example, Soler, 2009, Campbell 2013). Historically, in antiquity for example, elites might also have self-interests in *limiting* literacy acquisition to retain the social status, power and influence that literacy conveys to whom so ever has it (Bowman and Woolf , 1994, Heather, 1994). Existing social structures are also part of the socio-historical context of Lexism. To test this further, I propose a thought experiment (later in this section), in which I suggest what might change if dyslexics formed the majority of society. Drawing on Gramsci's (1971) concept of 'common sense' I suggest that we can view Lexism as part of our cultural inheritance. 'Common sense', as Gramsci uses it, means our commonly held beliefs about the world, ways of seeing the world in a particular way. I would suggest that Lexism is part of how we see the world; it is part of our common sense. As the majority of the population is non-dyslexic it is their views and beliefs which become 'common sense'; and those beliefs that elites in democratic societies replicate and favour within policy documents. The socio-historical context of literacy, however, is heavily influenced by the technology of literacy.

The 'technology of literacy' of a given time and place has an influence on elites and elite self-interests, and is an aspect of the socio-historical context, rather than Lexism *per se*. The phrase 'technology of literacy' includes the medium of recording literacy (PC hard drives or pen drives, mass produced paper, papyri, vellum, slate, clay or wax tablets) and the means of recording (such as typewriters, word processors, ink fountain or ball point pens, bronze styli and chalk). The medium and means of recording literacy all have technological limitations which impact on their cost, availability, practicality and durability. Consider for example, the time and resources required in a European medieval society to produce *one* book (in the form of a codex): if the medium of recording literacy was vellum (calf

or goat skin) and the means was laborious hand production using a quill. Compare the medieval codex with a papyrus scroll from the Great Library of Alexandria (in the Hellenistic period) created from cheap and easily available papyrus reeds from the nearby Egyptian delta. The technology of literacy in those two cases is significantly different and impacts upon their cost, practicality, durability, and so on. Most importantly, for our purposes, those factors impact in terms of whether literacy is thought of in terms of reserved to a tiny percentage of the population, or is a wider spread social practice. This in turn, one might surmise, will impact on to what extent literacy is normative.

Norms of literacy are not just impacted upon by the technology of literacy but also by the limitations of a particular script or written language, something long recognised as a problem (see, for example, Lathom, 1872). Jimenez et al (2009) note that dyslexic difficulties are less common in Spanish than English; Spanish is a more logically written language which is easier to learn. Lathom (1872) sought to reduce the problems of English by introducing new characters into the English alphabet and changing spellings so they became more phonetic. However, as I argue in Chapter 8, the temporal problem, what counts as literacy, and as defined by whom and why, occurs because of particular historical contexts, but the nature of the written language and the technology of literacy are related and contextual factors. The propositional knowledge required to engage in literacy practices is therefore more demanding in some contexts than in others. A common thread, historically speaking, is the attitudes towards propositional knowledge of literacy. McPhail and Freedman (2005) argue that during the late nineteenth century, dyslexics were seen as abnormal and barbarous; non-dyslexics as normal and civilised. Ryle (1949) noted that the valuing of propositional knowledge (including aspects of literacy) is espoused to justify concepts of superiority, originally of men

over animals and of civilised men over barbarians. Those who adopt the autonomous model of literacy likewise believe in a 'great divide' between the literate and the less literate or non-literate (Street, 1984, 1993).

We might ask to what extent does this belief in a 'great divide' (Street, 1984, 1993) form part of what Gramsci (1971: 323-324) calls 'common sense'. Gramsci (1971: 323-324) argues that 'common sense' is the historical and ideological foundation of how societies 'think'. Hoare, Gramsci's English translator notes: "common sense" means the incoherent set of generally held assumptions and beliefs common to any given society, while "good sense" means practical empirical common sense in the English sense of the term' (Gramsci 1971: 323, footnote 1). 'Common sense is, a chaotic aggregate of disparate conceptions' (Gramsci 1971: 422). Literacy has in the past acquired associations with 'civilisation', laws, full 'humanness' (see, for example, Wormald 1977, Millender 2001, Pagden, 2001). Gramsci does not claim that all of common sense is always incorrect, he suggests that common sense can include truths within it despite its inherent conservatism. He argues that, common sense 'is closely linked to many beliefs and prejudices, to almost all popular superstitions' (Gramsci 1971: 396). I argue that Lexism in the sense of the assumption of a link between literacy and intelligence can therefore be thought of as just such a 'belief' or 'prejudice'.

'Common sense', alongside elite self-interest in raising or maintaining norms of literacy have a direct influence on norms literacy which then Other dyslexics. Existing social structures and economic demands for higher literacy are all part of the socio-historical context of Lexism. Let us consider the following thought experiment. A society exists in which dyslexics are not a minority, but the majority. Non-dyslexics form one in ten of the population. First, because dyslexics are the majority, written language is not a criterion for judging ability or educational

potential. Second, non-dyslexics are considered to be gifted and talented in the area of written language and memory. However, as writing is not the norm, it is viewed as an additional ability beyond the core curriculum. Non-dyslexics are valued in a similar way to those gifted in mathematics in our own society. Let us consider what impact the structure of this society might have: literacy would be much less likely to have an association with intelligence, rather such features are associated with speaking and the spoken word. For the dyslexic majority there is a 'mystery' and 'paradox' that despite higher abilities in memory and literacy non-dyslexics can range in intellectual ability from the very able to those with limited intellectual ability. This enables us to see that in our own society, policies and government reaction to dyslexics reflect the 'common sense' of the majority (Gramsci, 1971). This too is an aspect of the socio-historical context.

#### **(12.4) Government and Bureaucratic reactions**

The reactions of government and bureaucracies (including teachers) to the existence of dyslexics relate to several aspects of Lexism. First, the outright rejections include the refusal to recognise or make adjustment for the existence of dyslexics in a non-dyslexic society. Historically, before dyslexia was widely accepted as a concept, it is reasonable to assume that this would have been a common occurrence. Though to what extent adjustments *now* for dyslexics are rhetoric, and to what extent they are reality, remains questionable (see, for example, Riddick, 2000, McDonald, 2012). Second, government policies on SEN, education and literacy aimed at full or total literacy. Third, teaching practices in SEN and literacy aimed at full or total literacy. Fourth, government reactions to dyslexics can include paternalism or disability hand-outs to assist the meeting of those normative assumptions and practices of literacy. An attempt to create full or total literacy is, for our purposes, that all people of all abilities 'read well' (Rose,

2009), spell accurately, and so on. This is distinct from mass literacy, which is merely that the majority are literate to various degrees of ability. To what extent full or total literacy is realistic is open to debate, but if the desire for it results in policies and attitudes which Other and discriminate against dyslexics, we can refer to it as a societal feature of Lexism.

The outright rejection of any form of adjustment for dyslexics, and a refusal to recognise the existence of dyslexics, might be for several reasons: simple apathy, a refusal to recognise the existence of dyslexics, a concern that adjustments might 'lower standards'. Burden (2005) provides examples of teachers refusing to recognise the existence of dyslexics, and this is an example of an outright rejection. Baroness Warnock's (Warnock and Norwich, 2008), provides another, she claims that her brief from the Department for Education for the 1978 Warnock report, specifically excluded dyslexics.

When the Committee of Inquiry was set up in 1974 there were two warnings we were given by the then Department of Education. The first was that we were not to include dyslexia as constituting a special need. This was because at the time dyslexia was thought to be a fancy invention of the middle classes to conceal the fact that some of their children were too stupid to be able to learn to read and write or perhaps calculate.... In the case of dyslexic children their needs are manifest, though not easy to meet.... Officially they are known as 'children with specific learning difficulties', a phrase intended to replace 'dyslexic', which was a word barred from the civil service vocabulary.

(Warnock and Norwich 2010: 22-23)

It should be noted, however, that Norwich (Warnock and Norwich, 2008: 68-69) suggests that it is not entirely accurate to claim that the report did not include reference to literacy difficulties, he points to section 3.9 of the report which refers to 'specific reading retardation', as dyslexia was then official termed.

Government educational policies and teaching practices which aim at full or total literacy (rather than just mass literacy) is another societal feature of Lexism. The key feature in such aspects of Lexism is an adherence to normative literacy, but it is not a simple or uniform adherence. Motivations, actions and practices vary and as such, are 'family resemblances' (Wittgenstein, 2001, PI §67). Lexism as a concept can have different uses and meanings which have both similarities and numerous differences. We can include within this classification teaching practices and Educational paternalism which seek to adhere to those policy agenda or beliefs. The attitude of policy makers towards literacy, and their reactions to dyslexics, creates a 'problem trap'. Dyslexia, as a discourse, I suggest has become part of a 'problem trap'. Walton (2010: 136) suggests that a 'problem trap' is the 'identification and articulation of the problem is a significant part of the problem'. Sheurich (1994) argues that some individuals are constructed within policy as problems whilst others are ignored. He emphasises that this construction of certain people as problems is 'normalised' through repetition within policy texts (Sheurich, 1994).

### **(12.5) Practical and Ideological**

A technology of literacy may have normative expectations associated which are ideological rather than practical. In the case of hand-written or print-based literacy those may include conceptions of what literacy 'should look like'. That can be based on tradition or long established practices rather than what is practicable *now*. Neat copper-plate hand-writing, for example, might be thought of as a traditional form of literacy. Such traditions are not aspects of Lexism, in and of themselves, rather, when such traditions become to be valued in such a way that dyslexics are Othered and discriminated, then, in that context, we may call them

features of Lexism. Out of date technological models of literacy are forms of literacy which no longer fulfil a practical utility that they once may have done. For example, copper-plate hand-writing produced at a Victorian clerk's desk was a standardised form of literacy fulfilling a practical purpose; copper-plate hand-writing in a modern office is now out of date. The a standardised form of recording information, is now based on PCs and IT systems. Adherence to out of date technological models of literacy (such as print-based or hand-written literacy) for *ideological* reasons, which then Others or discriminates against dyslexics, is a form of Lexism. Another, and related normative expectation is an unrealistic view of written language, which can on occasion Other or discriminate against dyslexics.

On occasion, we hold unrealistic expectations associated with that written language, we fail to appreciate the limitations that a written language may impose. This is regardless of how regular or irregular the written language is or how well its alphabet is adapted to the spoken language. Lathom (1872), for example, highlighted the problems of English; its complexity and irregular nature and the lengths one would need to go to try and rectify such problems. The differences in literacy difficulties between Spanish and English dyslexics demonstrate the limitations of an irregular and complex written language which may impact on how easily it is acquired, as compared to a regular and simple one (Jimenez et al 2009). If expectations of an irregular and complex written language lead to Othering and discrimination, we can call this Lexism. Within the thought experiment an Alternative Present, (in Chapter 4) I proposed three different scenarios of literacy, each with different normative criterion, in three different alternate realities. I did so to show that how we define literacy is actually just as important as how easy or



difficult the written language is to learn. It is all too easy, therefore, to adopt unrealistic expectations of literacy that become normative.

## **Conclusion**

In this chapter I focused on the societal features of Lexism. I reconsidered Riddick's social model taking into account both the philosophical and societal aspects of Lexism. I set out the societal features of Lexism in a table and gave those aspects broad classifications, and under each I provided examples of aspects of Lexism. I explained that the socio-historical context, as a classification, is the nature of literacy and beliefs associated with it in a given time and place. The other three classifications of societal aspects of Lexism I outlined in this chapter were: the government and bureaucratic reactions to the dyslexic population; the distinction between the practical and ideological associated with literacy practices; the social consequences for dyslexics of such attitudes towards literacy. I examined each of the aspects of Lexism under those four classifications, in turn. In this chapter I have provided one way of seeing or understanding Lexism. In chapters 13 and 14, I provide other ways of seeing Lexism which are distinct to the one provided here. This is intentional, for there are numerous ways of conceptualising Lexism.

## **Chapter 13 Ways of Seeing**

### **Introduction**

The focus of this chapter is to clarify my overall argument by offering an alternative conception of dyslexia (as a normative theory) and dyslexics (as those Othered my norms of literacy). I argue that dyslexics exist because of Lexism, rather than dyslexia. To do this I provide several different ways of seeing based on an understanding of Lexism. First, I provide a visual model of understanding the relationship between social constructions of literacy and the biology of the dyslexic. Second, I employ drapetomania as an object of comparison for dyslexia, in the light of conception of dyslexia as a being like a shadow. Drapetomania was a nineteenth century pseudo-scientific explanation for why slaves in the American Deep South ran away (Cartwright, 1851). Third, I outline the controversy over the 2016 national curriculum assessments which include penalties for spelling grammar and punctuation, set out in the *Interim teacher assessments framework at the end of key stage 2* (Standards & Testing Agency, 2015). Finally, I employ Oralism as an object of comparison for Lexism, with regard to the introduction of penalties for spelling, grammar and punctuation. Oralism was the prejudice against the deaf which repressed the use of sign language by the deaf community (see for example, Edwards, 2001 and Burch, 2001).

### **(13.1) Visual Model**

We can view dyslexia therefore as a normative theory to explain the existence of dyslexics. I set out in the thought experiments: 'An Alternative Present' (Chapter 4); 'Three Men and a Time Machine' (Chapter 8); 'the Cannae Rememberers' (Chapter 9), the influence and importance of such norms. I do not reject the role biology might play, I merely point out that it is not biology that

defines someone as dyslexic. In the thought experiment 'An Alternative Present' I emphasised the importance of judgements made about what counts as literacy deciding the numbers of dyslexics in a given population. Likewise, in the thought experiment Three Men and a Time Machine I sought to emphasise that we should not ignore the temporal problem of dyslexia (that norms of literacy change over time). If one is unaware of the temporal problem one can all too easily be led to the belief that the biology of an individual is more significant than it is. We cannot speak of a single aetiology of dyslexia as a simple thing, nor, however, can we rely on function in defining dyslexia.

As I note in the thought experiment the Cannae Rememberers the role of elites and their world view should not be ignored. Science, if it becomes 'an uncritical and all-pervading way of seeing the world' becomes scientism (Carr, 2005: 42). The Cannae Rememberers thought experiment, I would suggest, reveals the danger of scientism. Ways of seeing and world-views, including scientism, can be challenged without new information, but with a different way of seeing. As I note in Chapter 1, homophobia was challenged without recourse to new scientific information (Mayers and Horwitz, 2005). Consider for a moment, however, how difficult members of the elite who might adopt this form of scientism might find the questioning of what would appear to be obvious. Imagine a psychiatrist, brought up in the 1930s; in the 1970s the same psychiatrist finds his or herself challenged in their beliefs by the gay rights movement. To encourage those who adopt normative views of literacy, especially policy makers, to rethink their positions is not an easy task; I am reliant upon their *willingness to see* an alternative view of education, dyslexia and literacy. To assist us here I use a visual model.

Consider the following visual model, which may be helpful (Collinson, 2012). It should be read through the lens of all the thought experiments I have set out in this thesis. One might visualise a grand old country house, built, rebuilt, partially demolished and then redesigned and rebuilt again. This is how one might think of the changing history of the dominance of literacy in the world; its social context, the criteria by which we define someone as literate or not. Lexism is built into this old house's very fabric; it is part of its bricks and mortar if you will. The grand old house casts a shadow, which we might think of as 'dyslexia' as a scientific or educational construct. The shadow (dyslexia) cannot exist without the house (Lexism and literacy) which shapes it, and is distorted or changed by it as the house is rebuilt or altered throughout the centuries of its use. The shadow (dyslexia) also cannot exist without a source of light to create it. In this visual model the sun or other light source can be taken to be the biological or neurological makeup of the individual dyslexic.

Without both the dyslexic's biological makeup (the sun) and Lexism and literacy (the grand old house) there is no 'shadow' of dyslexia. It is the interrelationship between those factors that creates the shape of 'dyslexia'. The non-dyslexic majority have 'suns' that exist in the noon position and as such they cast no shadow. Yet perhaps upwards of 10% or 15% of the population have 'suns' in a wider variety of positions that do cast shadows, for whom using the term 'dyslexic' has a specific use in their context. Hence, there is no clear definition and each dyslexic is very different from the next. Because the 'grand old country house' (Lexism and literacy) changes slowly over time, as social norms of literacy change, no neat, empirical and universal definition of what defines a dyslexic can ever exist. Conceptually, we may say, therefore, that 'dyslexia' is like a shadow and attempting to define someone in any deterministic scientific sense

by the shadow, or even define the limitations of the shadow, is mistaken. Yet that is precisely what we do if we rely on judgments made at a social level to determine if someone fails to meet a norm of literacy. The misconception of dyslexics arises because we cannot perceive the role of Lexism in shaping dyslexia as a normative theory. To highlight this problem further I employ an object of comparison which highlights the problem of a normative theory used to defend an existing world-view.

### **(13.2) Object of comparison: Drapetomania**

In this section I employ an object of comparison for dyslexia as a normative theory; the nineteenth century pseudo-medical term ‘drapetomania’ (Cartwright, 1851). The definition of dyslexia is a ‘shadow’ cast by our normative expectations of literacy. As I note in Chapter 1, Standish (2012) employs the mediaeval superstition of witchcraft as an object of comparison for psychology. As Standish (2012) notes, existing world-views can contain ways of seeing which act as an explanatory basis. Drapetomania provides an example of a normative theory used to justify the existing world-view. Likewise I argue dyslexia is a normative theory used to justify the existing world-view and reveals a way of seeing which acts as an explanatory basis. The entire point of choosing drapetomania is that it is a pseudo-medical concept from the slave-owning Deep South in the 1850s, like witchcraft we can now see it for what it is. However, Northern contemporaries also viewed it as ridiculous, as we do now (Szasz, 1971).

‘Drapetomania’ was a ‘disorder’ that was believed to cause black slaves to run away from their white masters in the Deep South in the years preceding the American Civil War (Szasz 1971). The concept of drapetomania was developed by a doctor, Samuel Cartwright, who, in 1851, wrote an article in the *‘De Bow’s*

*Review*, to explain why slaves ran away. To a twenty-first century readership such a concept is unnecessary, it is obvious that slaves would want to run away.

However, the way of seeing the world of slave owners in the Deep South in the 1850s meant that they held beliefs (or claimed to hold beliefs) about the ‘peculiar institution’ of slavery. It was seen as a beneficial, (or at least argued to be), and humane form of oversight of people deemed mentally unfit. Indeed, Cartwright (1851) referred to ‘the Deity’s will’ and that the white man should keep the black slave ‘in the position that we learn from the scripture he was intended to occupy.’

The theory of drapetomania was based on a number of assumptions. Standish (2012) refers to as an ‘explanatory basis’ of a way of seeing the world is significant. In Cartwright’s theory it was a religious justification that acted as a ‘explanatory basis’. Cartwright (1851) believed:

- (a) in God’s will as expressed in scripture
- (b) that Biblical authority confirmed those of African descent were mentally unfit and inferior to those of European descent.
- (c) that slavery was a beneficial institution and a humane form of oversight, established by God in scripture
- (d) only those who were mentally unstable would wish to leave a beneficial institution and a humane form of oversight established by God.
- (e) therefore those who ran away from a beneficial institution and a humane form of oversight established by God must have some form of disorder.

Religion, or at least a highly distorted theological gloss, in Cartwright’s account is used to justify racism and slavery. If someone was equally racist and religious, drapetomania as a disorder that led slaves to run away from their masters might make sense.

To answer why slaves ran away, drapetomania is a normative theory used by one doctor in an attempt to rationalize this contradiction between a supposed beneficial and divinely inspired social institution and the desire of black slaves to escape it. The object of comparison can be seen from table 13.1 that different

features come to the ‘foreground’ or the ‘background’ depending on the person’s socio-historical context on both drapetomania/racism and dyslexia/Lexism.

**Table 13.1 Drapetomania and Dyslexia compared**

<b>Socio-historical context</b>	<b>Foreground Aspects</b>	<b>Background Aspects</b>
Antebellum Deep South	Drapetomania and runaway slaves	Racism
Modern multiculturalism	Racism and runaway slaves	Drapetomania
Current UK context	Dyslexia and literacy difficulties	Lexism
My position as set out in this Thesis	Lexism and literacy difficulties	Dyslexia

The historical case of drapetomania as an object of comparison aids the clarity of my argument, but it does not evidence it. This table, therefore, only demonstrates two features: first, that socio-historical context (including a way of seeing the world) limits one’s clarity of thought; second, it is this lack of a clarity that hides what should be plain to us, whether it is racism or Lexism. As racism and Lexism are very different phenomena we cannot generalise more than this. As an object of comparison, this table may be of use to us, it highlights that the lack of clarity arises from the strong desire to ascribe reasons for *why* some people struggle with literacy or others run away from slavery, other than which is obvious but uncomfortable to the proponents of dyslexia and drapetomania respectively. Normative theories are therefore proposed (dyslexia and drapetomania) to retain the existing world-view.

However, there are several notable differences between Lexsim and racism in this object of comparison. First, that dyslexics so often accept dyslexia as an explanation. If dyslexics are confronted with the idea that dyslexia is an unhelpful

concept, it is unsurprising that a natural reaction *might* be to reject such a suggestion. They retain their belief in dyslexia as a normative theory to challenge a greater problem of normative literacy, based in folk psychology and our conceptions of literacy. We cannot discern dyslexia as a normative theory easily because the important features are in the ‘background’ for us, yet other aspects, which distort our view, are in the ‘foreground’. In the case of drapetomania, that which was in the ‘foreground’ for white slave-owners, is now for us a ‘background’ aspect. We now see drapetomania for what it is, and racism comes to our ‘foreground’; yet it was a ‘background’ aspect for slave-owners. Dyslexia as a normative theory, I argue, is similar to drapetomania in this regard: ‘foreground’ and ‘background’ aspects have to be reversed for us to discern it with clarity.

### **(13.3) Recent policy developments**

In this section I note the controversy over the introduction of the *Interim teacher assessment frameworks at the end of key stage 2* (Standards and Testing Agency, 2015) and the Key Stage 2 English and grammar, punctuation and spelling tests. I am not making empirical claims about this material; I merely offer it as an example of something we might wish to view in another way in the light of Lexism. I employ an object of comparison for this material in the next section. Both the British Dyslexia Association (BDA) and Dyslexia Action have raised concerns that the Key Stage 2 English tests and the interim assessment framework will disadvantage dyslexic pupils unfairly because the spelling mark will impact on their overall mark and not be assessed separately (see, for example, Studying with dyslexia blog, 5<sup>th</sup> April 2016). A petition has been instigated to ‘reinstate allowances spelling for pupils with dyslexia’ (Petition Parliament, 2016). The conceptions of literacy and dyslexia in this case are significant.



The Department for Education's response was to reemphasise a conception of spelling as a skill required 'to succeed in secondary school' and 'a vital element of the National Curriculum' (Petition Parliament, 2016). This is an example of how conceptions of education (as opposed to the concept of education) reflect a set of values and beliefs, usually of 'political elites'. Furthermore, such conceptions are expressed through educational policy, and there is 'a continuing elitist pattern of policy-making' (Winch and Gingell, 2004: 8). As McLaughlin (2005) notes, those who influence politicians and civil servants through lobbying, are also makers of policy. Furthermore, these recent policy developments should be seen in the context of the 2010 white paper under Michael Gove, the then Secretary of State for Education.

Gove's position on spelling, punctuation and grammar in exams was set out in the 2010 white paper and several letters to Glenys Stacey (Chief Executive of OfQual). Gove, in the 2010 white paper, puts forward the argument that 'when young people compete for jobs and enter the market place, they will be expected to communicate precisely and effectively' (DfE, 2010: 49; section 4.50). This is the justification for introducing penalties for mistakes in spelling, grammar and punctuation (DfE, 2010). The 2010 white paper also argues that reforms are introduced to aid the HE sector to select students (DfE, 2010: 49; section 4.47). By September 2011 OfQual engaged in a consultation to agree means to enforce these changes. Significantly, it emphasises 'that greater account is taken of spelling, punctuation and grammar in GCSE qualifications' (OfQual, September, 2011: 2, section 1; iii). This change was originally only to cover History and Geography (Stacy, letter to Gove 11<sup>th</sup> May, 2011), however, Gove in a letter to Glenys Stacy (27<sup>th</sup> June 2011), insists that this also include RE and English

literature. Gove, here, was enforcing normative literacy on dyslexics regardless of equalities legislation.

Stacey, as Chief Executive of Ofqual, wrote a letter in response to Gove's request, stressing the potential problem that these changes would have for dyslexic students. Stacey, in a letter to Gove (11<sup>th</sup> May, 2011: 4), states that Ofqual would examine the problems that led to the removal of these requirements in 2003. Stacey also notes that, in doing so, Ofqual would work with 'representatives of disability groups', among others, suggesting that Ofqual is well aware of the difficulties such changes will bring. Stacey (11<sup>th</sup> May, 2011: 3) notes that in the 1990s, five per cent of the marks in GCSE examinations were allocated to spelling, grammar and punctuation after concerns were raised about written work of 16 year olds. This ended in 2003 because it was felt that 'some candidate's grades reflected performance in spelling, grammar and punctuation at an unacceptable cost to the subject being assessed.' An obvious group who would have been penalised unfairly would have been dyslexic pupils. However, Stacey in a letter to Gove (11<sup>th</sup> May, 2011; 5), also appears to be reinforcing normative literacy. Referring to the introduction of the change in History and Geography in the short term she states: 'Taking action in these two subjects will send out a strong signal about the importance we attach to young peoples' use of accurate spelling, punctuation and grammar'. The use of terms such as 'taking action' and 'a strong signal' is suggestive of a conception of normative literacy which should be enforced. Furthermore, Stacey's phrase the 'importance we attach' is suggestive that it is an importance which distorts and appears to come before the subject knowledge and understanding which the GCSE student is being marked on.

Gove's and Stacey's conceptions of literacy reveal several ethical problems. In introducing such changes logically they are discriminating against those whose subject propositional knowledge and rational understanding is greater than their written English. This also gives unfair advantage to those whose subject knowledge and understanding is less but whose literacy is of a 'higher standard'. The 'HE model' is more concerned with critical and analytical skills than spelling, grammar and punctuation and makes greater allowance for dyslexic students than the school system. Gove ignores assistive technological or even basic tools of the office environment used by virtually all employers, such as word processing packages for PCs and lap tops. The comment in the 2010 White paper projects the concept of hand written literacy, as conducted in schools, into a work and HE environment. Yet the argument for deducting marks is based on the 'real world' work environment or the HE sector, in which these spell checkers would be enabled and used by everyone. The justification for Gove's conception of literacy may be the 'real world' of work, yet Gove actually ignores technological change and development. The argument put forward, even by Gove's own criteria, is not logical. In the case of Stacey, it is unclear within her arguments why she thinks what did not work before can be justified and reintroduced. The conception being applied in 2011, and now in 2016, is that dyslexics have no right to adjustments and must comply with the expectations of normative literacy.

If one were to adopt a social model of dyslexia, one might argue that the Government's agenda reveals aspects of (i) Othering and discrimination (aspect 1 of Riddick's model) and (ii) cultural features relating to social norms of literacy (aspect 2). If MacDonald (2009a and b, 2010a and b, 2012), for example, were to adopt this interpretation (which is distinctly possible, as he build on Riddick's model), it would be fair one to a certain extent. However, if one were to adopt an

understanding based on Lexism, we might suggest it does not go far enough. Recent policy developments (especially from 2010 onwards) can be seen as moves towards a more normative conception of literacy, or perhaps as an aggressive defence of an existing traditional conception of literacy. If one adopts the social model of dyslexia, however, one would accept the concept of dyslexia as impairment, and leave the conceptual foundations of normative literacy unchallenged. Lexism's value as a concept enables us to see recent policy agenda in different ways; however, the exact interpretation and analysis of those documents is beyond the scope of this thesis.

### **(13.5) Oralism: an object of comparison.**

In this section I employ Oralism as an object of comparison to clarify the value of Lexism as enabling to new ways of seeing. The ideology of Oralism, prevalent in the late nineteenth and early twentieth century, is that sign language is inferior to speech. Oralists argued that the deaf should not learn sign language, only how to learn to speak and lip read (Edwards, 2001 and Burch, 2001). Edwards (2001: passim) demonstrates how Horace Mann, an American Oralist in the late nineteenth century, believed speech to have a 'humanizing power'. In this period, the deaf were largely pro-sign language, the hearing elite largely Oralists. It is only with the growth of the deaf political lobby that sign language was finally accepted. However, during the late nineteenth and early twentieth century, Deaf culture was under sustained attack from Oralists (Burch, 2001, Edwards, 2001). In both the case of Oralism and Lexism, we can see language (spoken or written) being treated as a normative criterion. In the case of Oralism, both Burch's (2001) and Edwards' (2001) accounts suggest that this is an historical interpretation accepted as straightforward and factual in deaf historiography. It is the scholarship of Burch (2001) and Edwards (2001) that provides the features of Oralism I outline

below. In the case of Lexism, the normative conceptions of literacy are drawn from the *Interim teacher assessment frameworks at the end of key stage 2* (Standards and Testing Agency, 2015) and the Key Stage 2 English and grammar, punctuation and spelling tests.

The object of comparison is as follows: both Oralism and Lexism are the agenda of an elite (the hearing or non-dyslexic elite). There are both subtle and obvious differences, however. Oralism is concerned with spoken language, Lexism with written language; in both cases there is an assumed 'norm'. Oralism fails because of the resistance of the deaf community; in the case of Lexism, the outcome is unknown. The agenda of normative expectations of spelling, enforced by the non-dyslexic elite, is like that of the hearing elite enforcing speaking English on the deaf community. In the case of Oralism, the attempt to repress sign language failed. The resistance of the BDA and Dyslexia Action, however, is that of professional organisations with a vested interest in dyslexia as a concept: it is not a popular movement of dyslexics. Like the Oralists' view of spoken language, current Lexists have a narrow conception of written language. Whether this conception of written language is enforceable, as they seem to believe, is open to question. The banning of spellcheckers in certain exams and the implied rejection of text-to-voice and voice-to-text software is similar in some regards to Oralists seeking to repress the use of sign language. Sign language is a language in its own right; likewise, it makes little difference to the meaning of a text if it is 'read' by text-to-voice software or by an 'accurate' reader looking at a print-based text. Yet, both Oralists and Lexists believe, genuinely and perhaps with the best of intentions, that their norms must be shared with those who have different capacities and needs to their own.

**Table 13.1 Oralism and Lexism compared**

<b>Aspects of Oralism</b> (From: Edwards, 2001 and Burch, 2001)	<b>Aspects of Lexism</b> (From: The <i>Interim teacher assessment frameworks at the end of key stage 2</i> (Standards and Testing Agency, 2015) and the penalties for grammar, punctuation and spelling tests; in the Key Stage 2 English and GCSE exams)
Spoken language seen as 'humanizing'.	Print-based texts seen as the only route to education.
Outright rejection of sign language	Penalties for mistakes in spelling, grammar and punctuation.  Banning spellcheckers in certain exams.
Agenda of a hearing elite	Agenda of a non-dyslexic elite
Outcome: Sign language reasserted, Oralism rejected by the deaf community	Outcome: unknown.

## **Conclusion**

In this chapter, I focused on different ways of seeing dyslexia and what it is to be dyslexic. I argued that dyslexia is a normative theory, and the normative assumptions within that theory are what Others dyslexics. I provided a visual model to assist our understanding, that literacy, as socially constructed, impacts on who is defined as dyslexic, not just the biology of the individual dyslexic. I employed drapetomania as an object of comparison for dyslexia, to develop the critique of dyslexia as a normative theory further. I outlined the controversy over the penalties for spelling grammar and punctuation, and employed Oralism as an object of comparison.

## **Chapter 14 Orientalism, as an Object of comparison for Lexism**

### **Introduction**

The focus of this chapter is to provide an extended object of comparison for Lexism, namely Edward Said's (1978) critique of Orientalism<sup>17</sup>. I argue that Said's definition of Orientalism is a useful comparison to make; though notably different in some aspects, its similarity in others helps to clarify the overall argument of this thesis. It is for this reason that I engage in this object of comparison in the last chapter. An object of comparison by its very nature does not provide further evidence - it enables me to clarify *one* way that we *might* view Lexism. In Chapters 11, 12 and 13, I provided *other* ways of understanding Lexism. I am not seeking to provide a categorical definition of Lexism; rather, I provide a way of seeing Lexism as an expression of beliefs and practices of those who write, replicate or enforce education policy.

The structure of this chapter is as follows, in the first section, I highlight the key features of Orientalism which are similar to, but not the same as, Lexism. In the second section, I highlight Lexism in terms of what Edward Said calls a 'limitation on thought'. That is, a series of attitudes and beliefs which constrain what can be thought, or, it is socially acceptable to say or act upon. An important aspect of this 'limitation of thought' is the intellectualist doctrine. In the third section, I consider how Said chooses to define 'power': political, cultural, intellectual and moral. I apply these definitions of power to how we might envision

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<sup>17</sup> I would stress that whether Said is correct in all his assertions is beyond the scope of this thesis. Indeed it would not matter to this object of comparison if he is incorrect, Said's work is only used as means to enable me to develop *one* conception of Lexism.

Lexism. Finally, in the fourth section I compare this way of seeing Lexism, clarified by this object of comparison, with Riddick's social model of dyslexia. I argue that the social model is a partially successful attempt to free us from Lexism as a 'limitation of thought'. The attempt fails because of the strength of the limitation Lexism has upon us, and that we seek to retain the concept of dyslexia as impairment because of our misconceptions surrounding literacy.

### **(14.1) Aspects of Orientalism**

In this section, I examine how Said uses the terms 'corporate institution' and 'flexible positional superiority'. I argue that Lexism is a corporate institution in the manner Said uses the term; Lexism in the form of normative literacy authorises views of dyslexics as abnormal or inferior. I set out these key aspects in Table 14.1, which provides an overview of all of the features I examine in this chapter in a simplified format. In Table 14.2, I outline Lexism as a corporate institution with flexible positional superiority, and different forms of 'power' in greater detail than in Table 14.1. Lexism as a corporate institution (with power political, cultural and moral) enables policy makers to justify policies that reinforce normative literacy and the enforcement of those policies by bureaucrats and teachers. Power intellectual is represented by psychologists and teachers who are dyslexia 'experts', who describe dyslexics in particular ways, teach dyslexics in particular ways, and thereby have authority over dyslexics. The non-dyslexic elites seek to 'restructure' or remediate dyslexics as, at best, honouree non-dyslexics. This corporate institution of Lexism provides non-dyslexic policy makers, bureaucrats and specialists with what Said terms flexible positional superiority. Normative literacy justifies a whole series of relationships between non-dyslexic elites and dyslexics, in which dyslexics rarely have an opportunity to challenge or question



Lexism. The Othering and discrimination of dyslexics occurs within Lexism as a corporate institution, and within schools, universities and workplaces, all of which have Lexism embedded within their practices, norms and beliefs.

**Table 14.1 Orientalism and Lexism, key features (simplified)**

<b>Aspects of Orientalism</b>	<b>Aspects of Lexism</b>
A 'corporate institution' having authority over the Orient.	A 'corporate institution' having authority over dyslexics.
A limitation on thought and action	A limitation on thought and action
Superiority of the West over the Orient	Superiority of non-dyslexics over dyslexics.
Flexible positional superiority	Flexible positional superiority
Orientalism is 'Pure knowledge'	Dyslexia is 'Pure knowledge'
Power: political, intellectual, cultural and moral.	Power: political, intellectual, cultural and moral.

I argue that Said's (1978: 3) term 'corporate institution' is applicable to Lexism; it includes authorising views on dyslexics, describing, teaching, dominating and having authority over dyslexics. This is reliant on what Said (1978: 3) terms 'flexible positional superiority'. Said defines Orientalism thus:

Orientalism can be discussed and analyzed as the corporate institution for dealing with the Orient - dealing with it by making statements about it, authorizing views of it, describing it, by teaching it, settling it, ruling over it: in short, Orientalism is a Western style for dominating, restructuring, and having authority over the Orient.  
(Said, 1978: 3)

This object of comparison, as I set out in Table 14.1, allows us to draw out similarities between how we might conceptualise one form of social domination arising from conceptual confusion and another. In doing so, Said's (1978) definition of Orientalism provides a way of seeing, a way to look at normative literacy in a different way, as an 'ism', Lexism. The principal difference between Orientalism and Lexism is that one focuses on a geographical and ethnic concept (the 'Orient'), the other on normative aspects of literacy. Of significance for us,

however, is that Orientalism was once seen as 'pure knowledge'; as 'dyslexia' is now. However, Orientalism has largely ceased to be so, and in doing so, provides a way of looking at Lexism which avoids assumptions of 'pure knowledge' which one might argue is a 'limitation on thought'.

If one compares Lexism to Orientalism, flexible positional superiority is important to both. Said (1978) argues that westerners maintain their dominance over the Orient through a whole series of positions and possible relationships. Said argues that, in:

a quite constant way, Orientalism depends for its strategy on....flexible positional superiority, which puts the westerner in a whole series of possible relationships with the Orient without ever losing him the relative upper hand. (Said, 1978: 7).

Lexism also can be said to place the non-dyslexic 'expert' in a position of flexible superiority which places them in a number of possible relationships in which this superiority is maintained: the SEN/remedial teacher, the psychologist providing a formal assessment or 'diagnosis' or an informal assessment by a specialist FE/HE support tutor. In all of those potential relationships, the dyslexic is the inferior, the assessed, the lesser in need of remediation. Those relationships allow the non-dyslexic to retain their position of authority: Educational Psychologists Other dyslexics as impaired or abnormal against a perceived non-dyslexic norm; Policy makers write education policy which reinforces, replicates and, on occasion, enhances social norms and expectations of literacy; bureaucrats and teachers enforce and maintain these education policies at a local level. I clarify my argument in Table 14.2 below.

**Table 14.2 A corporate institution, flexible superiority and power (detailed)**

Aspect of Orientalism	Aspect of Lexism
The 'corporate institution for dealing with the Orient - dealing with it by making statements about it, authorizing views of it, describing it, by teaching it,...in short, Orientalism as a Western style for dominating, restructuring, and having authority over the Orient'. (Said, 1978: 3)	The corporate institution for dealing with the dyslexic minority; <i>dealing with dyslexics by making statements about dyslexics, authorizing views of dyslexics, describing dyslexics, by teaching dyslexics</i> . Lexism is a non-dyslexic style for dominating, restructuring, and having authority over dyslexics.
'Orientalism depends for its strategy on....flexible positional superiority, which puts the westerner in a whole series of possible relationships with the Orient without ever losing him the relative upper hand'. (Said, 1978: 7).	Lexism depends for its strategy on ' <i>flexible positional superiority</i> ', which puts the non-dyslexic policy maker, bureaucrat, 'specialist' or 'expert' in a whole series of possible relationships with dyslexics without ever losing their relative upper hand.
Power political (the State) Power intellectual (such as the sciences). Power cultural (orthodoxies, tastes and values). Power moral is 'ideas about what 'we' do and what 'they' cannot do or understand as 'we' do'. Said (1978: 12)	Lexism is reflected in texts created by the power political (White papers on Education, for example) power intellectual (scientific discourse on 'Dyslexia') and power cultural (orthodoxies, tastes and values concerned with the place of literacy in society). Power moral is 'ideas about what 'we' do and what 'they' cannot do or understand as 'we' do'. 'They' being dyslexics and 'we' being non-dyslexics.

Said, in analysing Orientalism, is assessing a form of Othering and discrimination based on ethnic and geographical identity. In examining Lexism, I am analysing a form of Othering and discrimination based on different capacities to learn propositional knowledge of literacy. Said argues that Orientalism is a corporate institution; a 'corporate institution' can be thought of as a multitude of actions (for example, teaching, describing, restructuring), carried out by a number

of different actors (for example, scholars, merchants, soldiers, bureaucrats), for the purpose of 'having authority over the Orient' (Said, 1978: 3). 'Flexible positional superiority' is the conception of the superiority of one group over another (its position) being maintained in a number of different contexts. 'Power', as Said uses it, is the concept of not only political power, but also, the influence of beliefs (including tastes and values) and dominant discourses (such scientific accounts). Lexism, unlike Orientalism, does not involve an element of 'settlement' nor geography, yet the other aspects are similar. Lexism is evident in how policy makers authorise views of literacy and dyslexics within educational policy. Said's phrase 'ruling over' is applicable to Lexism in the sense of non-dyslexics governments ruling in the interests of non-dyslexics. I do not argue that Educationalists and Psychologists do so through any form of malicious intent; rather, Lexism is a limitation on their thoughts and actions, in short, a form of conceptual confusion.

#### **(14.2) A limitation on thought**

In this section, I consider three aspects of Said's concept of Orientalism as an object of comparison for Lexism. These are: (i) a limitation on thought and action; (ii) the concept of the superiority of one type of person over another; and (iii) the distinction made between 'pure' and political knowledge. Said argues that, without understanding Orientalism as a dominant discourse, one cannot understand the West's relationship with the 'Orient':

Moreover, so authoritative a position did Orientalism have that I believe no one writing, thinking, or acting on the orient could do so without taking account of the limitations on thought and action imposed by Orientalism. (Said, 1978: 3).

This quotation has a correlation with Lexism: I argue that Lexism is a dominant view that functions in this way, following Said. I suggest that transposing Lexism

for Orientalism in the above texts would bring out aspects of how we might use Lexism as a *concept*. Normative literacy has indeed acquired an authoritative position within concepts of education and literacy, so much so that educationalists and psychologists have been intellectually limited in how they write, think and act towards dyslexics. However, I would not go as far as Said in claiming that *no one* can avoid being influenced by Lexism. I amend this, for the sake of caution, to the majority being influenced in how they think, act, and so on towards literacy and dyslexics.

Said argues further that 'European identity' is considered (by Europeans at least) as superior compared with 'non-European peoples and cultures' (Said, 1978: 3). Said is referring not just to views contemporary to his own, but also to imperial expansion during the eighteenth and nineteenth centuries, in which 'European imperialists were the agents of progress', or at least believed to be, for those peoples deemed inferior by Europeans themselves (Pagden, 2001: 145). Likewise, I argue that non-dyslexic identity is considered the superior (the norm) to dyslexic identity which is considered inferior (or abnormal). In the case of Lexism, non-dyslexics might assume dyslexics to be inferior; either because they believe dyslexics are stupid or because they view dyslexics as impaired. Both conceptualisations of dyslexics reveal an adherence to the intellectualist doctrine applied to norms of literacy. In Chapter 10, I examine intellectualist doctrine as an aspect of Lexism in detail. The concept of the superiority of the non-dyslexic is implied in the idea of an impairment termed dyslexia. Riddick's social model, despite her good intentions, implies an acceptance of this aspect of normative literacy. In contrast an understanding of Lexism would reject this concept of non-dyslexic superiority.

Psychologists and educationalists *might* choose to claim that dyslexia is factual or 'pure' knowledge, even if they cannot agree amongst themselves on a single definition. However, we should be cautious in accepting such a belief. Eugenicists and social Darwinists who adopted racist ideologies during the latter part of the nineteenth century, believed in the scientific value of their theories (see for example, Thompson, 1998). Such 'pure knowledge' was part of such wider dominant discourses, which included elitist views of literacy and dyslexia as a normative theory (see for example, Carey, 1992, McPhail and Freeman, 2005). Any discussion of dyslexia, I suggest, inevitable becomes political in nature. As Said notes:

What I am interested in doing now is suggesting how the general liberal consensus that 'true' knowledge is fundamentally non-political (and conversely, that overtly political knowledge is not 'true' knowledge) obscures the highly if obscurely organised political circumstances obtaining when knowledge is produced. No one is helped in understanding this today when the adjective 'political' is used as a label to discredit any work for daring to violate the protocol of pretended suprapolitical objectivity. (Said, 1978: 10).

Said makes an important point, especially relevant to a thesis such as this in which I adopt a philosophical position on that which is usually deemed the realm of the 'scientific'. If scientists argue for a thing called 'dyslexia', policy makers, teachers and the general public can be forgiven for thinking that the science around dyslexia is 'true' or 'pure' knowledge. I set out the key features of Lexism as a limitation on thought in table 14.3, below.

**Table 14.3 A limitation on thought**

Aspect of Orientalism	Aspect of Lexism
'No one writing, thinking, or acting on the orient could do so without taking account of the limitations on thought and action imposed by Orientalism'. (Said, 1978; 3).	The majority who write, think, or take actions about literacy and dyslexics do so taking account of <i>the limitations on thought and action imposed by Lexism</i> .
'European identity' is considered (by Europeans at least) as superior compared with 'non-Europeans peoples and cultures.' (Said, 1978: 3).	<i>Non-dyslexic identity is considered as superior</i> , compared with dyslexic identity.
Orientalism is seen as 'pure Knowledge'. [Knowledge can be separated between 'pure' i.e. factual and 'political' i.e. ideological knowledge.] (Said, 1978: 9).	'Dyslexia' is seen incorrectly as 'pure' knowledge; however, Lexism can be seen as 'political' knowledge.

I argue that those aspects of Orientalism, as set out above, are similar to, but not the same as, Lexism. First, Lexism is a limitation on both thought and action, a conceptual confusion which limits what is written and thought about both literacy and dyslexics. I do *not* argue that *everyone* writing or thinking about dyslexics or literacy is conceptual confused in this manner; this is too absolute. Second, the concept of dyslexia as impairment leads to the idea of the superiority of non-dyslexics over dyslexics. Third, that scientific constructs are often assumed to be 'pure' knowledge as opposed to political knowledge. As such, if someone claims dyslexia as a scientific fact they are claiming dyslexia as pure knowledge. An understanding of Lexism, in contrast I suggest, is political knowledge, as Said defines it. I do not claim that these features of Lexism are indicative of an *intention* to oppress, Other or discriminate; rather, that they arise from a particular view of the world.

Lexism is a limitation on thought based on the concept of non-dyslexic superiority, dyslexic inferiority, and dyslexia as 'pure' knowledge. Dyslexia as a scientific construct might be seen as what Said terms 'pure knowledge'. An awareness of Lexism can be thought of as political knowledge, or perhaps for dyslexics it can be thought of as political self-awareness. An understanding of Lexism enables us to question this limitation on thought. The concept of non-dyslexic superiority I highlight in Chapter 7, in terms of prejudice towards dyslexics, in Chapter 8 in terms of the historical origins of such beliefs, and in Chapter 10, in terms of the intellectualist doctrine. Lexism as a limitation on thought arises from an adherence to the intellectualist doctrine, conflating propositional knowledge with intelligence. This leads to a belief that a non-dyslexic is superior to an abnormal or impaired dyslexic. Scientific discourse is socially constructed as 'pure knowledge'; the discourse on dyslexia written in a scientific manner appears or claims scientific credibility. Said's interpretation of Orientalism provides a useful means to consider Lexism; to be aware of Lexism is to be aware of a current limitation on our thought and actions.

### **(14.3) Definitions of Power**

Said (1978: 12) points out that there are several forms of power: power political (the State) power intellectual (such as the sciences) and power cultural (orthodoxies, tastes and values). Finally, there is power moral, which Said (1978: 12) describes as 'ideas about what 'we' do and what 'they' cannot do or understand as 'we' do'. Obviously these concepts of 'power' are not exhaustive. I use these different concepts of power only as a means to interrogate Lexism further. I examine Lexism's power political, as expressed in educational policy and the enforcement of normative literacy by the state. I argue that Lexism's power intellectual is that of Psychology which replicates and reinforces normative literacy.



I consider Lexism's power cultural and power moral together; as factors which relate to the second aspect of Riddick's model. I argue that Lexism is maintained, replicated and/or originated in these different forms of power.

Said argues that Orientalism reflects power political, that of the state and its institutions. Said (1978: 10) highlights the 'obscurely organised political circumstances obtaining when knowledge is produced'. With regard to Lexism one might argue that these are government agenda, popular Lexist assumptions and media generated pressure which maintain Lexist social norms and practices. Here we can consider the actions of schools and the practices of teachers, where dictated by legal codes and government policy, to be an aspect of Lexism power political. One could of course argue for equalities agenda and legalisation as weakening Lexism's power political, or as merely nominal and superficial efforts at inclusion.

Said defines power intellectual as Orientalist scholars who write treatises, study and examine the Orient. Such scholars, Said argues, judge the Orient by western norms and suggest that the Orient, once great, is now inferior and degenerate. Likewise with Lexism, I argue that it has a power intellectual. An example would be the APA (1994, 2013) and WHO (1994) definitions of equivalent terms to dyslexia which I examine in Chapter 5. Similarly, neuro-scientific claims of brain scans 'proving' the existence of dyslexia can be viewed as part of Lexism power intellectual, as well as an example of the idea of 'pure' knowledge. Assumptions of normative literacy are given intellectual justifications and credence, which in turn justify and enhance Lexism's power political. Other examples of power intellectual would be the existence of academic journals such as *Dyslexia*. In contrast, expressions of normative literacy based on folk

psychology which rejects the existence of dyslexics (in the sense of the intelligent but less literate), has little or no power intellectual.

Said argues that power cultural includes Orthodoxies, tastes and values. Power moral is ideas of what 'we' do and what 'they' cannot do or understand (Said 1978: 12). If, (and I stress the use of the word 'if'), a non-dyslexic professional or expert assumes they have a moral power and superiority over dyslexics, this would be an example of Lexism's power moral. Dyslexic complaints and criticisms of professionals, such as teachers, can on occasion infer Lexism's power moral (see for example Burden, 2005). Lexism's power cultural, broadly speaking, is similar to what Riddick terms 'cultural factors' within her model. I would include under categories such as Orthodoxies: the intellectualist doctrine and the autonomous model. Naturally, this form of 'power' relates to the concept of a limitation on thought and action. Thoughts and actions are limited by Lexism because of these Orthodoxies and tastes which value particular forms or practices of literacy. Likewise, power moral is directly linked to the concept that dyslexics are inferior to non-dyslexics. Power moral implies the superiority of 'we' (non-dyslexics) and the inferiority of 'them' (dyslexics).

To a certain extent Lexism's power: political, intellectual, cultural and moral, do not contradict Riddick's social model of dyslexia. Indeed, if one so wished, one could take those aspects of Said's analysis of Orientalism and incorporate them within the social model of both disability and dyslexia. However, I argue that those forms of power lead ultimately to a need for a concept such as dyslexia as impairment (aspect 3 with Riddick's model). Power political replicates and enforces normative literacy in our education system by which dyslexics are judged abnormal or inferior. Power intellectual, as expressed through Educational

Psychologists' reports or neuro-scientific brain scans, justify normative literacy, again which judge dyslexics as abnormal. Power cultural is expressed through the prejudice or contempt which dyslexics experience; judged inferior by Orthodoxies and tastes within society and held, replicated and enforced by the political elite. Power moral is more subtle. If a dyslexic experiences being talked 'down to' or patronised *because they are dyslexic*, this would be an example of power moral.

#### **(14.4) Riddick's social model and Lexism compared**

Riddick's social model fails to be fully successful because of Lexism as a limitation on thought. I reconsider aspect 1, the Othering and discrimination of dyslexics. I suggest that Riddick does not go far enough; she does not recognise that the concept of dyslexia as an impairment is a form of Othering. Riddick only partially questions the Orthodoxies, tastes and values that make literacy normative. I examine 'cultural factors' (aspect 2) which disable dyslexics further and which is seen as distinct from their impairment. Again, I argue that Riddick is not as critical as she could be; she does not recognise that such factors limit how we think about, and act, with regard to dyslexics and literacy. In terms of the third aspect of Riddick's model (impairment), she fails to recognise a conceptual confusion; she sees dyslexia as 'pure knowledge' based on science. Riddick might well recognise her own social model as political knowledge, however, she leaves 'impairment' unchallenged. In doing so, Riddick leaves normative literacy as a corporate institution unquestioned.

The first aspect of Riddick's model is Othering and discrimination. The Othering of dyslexics, I would suggest, arises from Lexism's 'power cultural and moral', the concept of non-dyslexic superiority. The orthodoxies and values surrounding literacy are normative; the prejudice and contempt dyslexics experience, and which Riddick (2001) rightly highlights, perhaps arise from those

normative beliefs. The orthodoxies, tastes and values surrounding literacy have the intellectualist doctrine embedded within them, as I argue in Chapter 10. The discrimination that dyslexics face may arise from Lexism's power political and intellectual. Lexism's power political is expressed through educational policy. Lexism's power intellectual, the influence of specialists and experts, reveals itself through the necessary and conjointly sufficient conditions they use to define dyslexia or equivalent terms (for example APA 1994, 2013, WHO 1994). As I argue in Chapter 5, the use of such terminology is itself a form of Othering. The Othering and discrimination can occur within a range of relationships and relative positions between dyslexics and non-dyslexics. This occurs through flexible positional superiority; non-dyslexic experts, specialists, policy makers, teachers and bureaucrats rarely lose their position of authority over dyslexics.

The second aspect of Riddick's model is how 'cultural factors' (historical and non-historical) impact on and disable dyslexics further. The influence of our ways of seeing the world is perhaps a clearer way of referring to those cultural factors; this includes: language use, beliefs and traditions of thought. We may call this a limitation on thought and action, integral to Lexism as a corporate institution having authority over dyslexics. Furthermore, our Orthodoxies, tastes and values associated with literacy are historically acquired as well as socially fluid; part of the cultural heritage in which Lexism is embedded. As I argue in chapters 8 and 10, normative literacy is embedded within our history and continues within our current social practices and beliefs. A key feature of this embedded normative literacy is the intellectualist doctrine, which views a capacity for propositional knowledge (including aspects of literacy) as the foundation of intellectual ability. As I argue in Chapter 8, fluidity in Orthodoxies, tastes and values associated with literacy results in a temporal problem in defining dyslexia; this is not obvious to us

because Lexism exerts a limitation on thought and action through its power intellectual, cultural and moral.

The third aspect of Riddick's model is dyslexia as impairment, distinct from 'cultural factors'. Due to the limitation of thought and action that Lexism imposes, normative assumptions of literacy go unquestioned, even if the existence of dyslexia is questioned. It is possible to question both possible foundations of dyslexia as an impairment, dyslexia as a single aetiology or based on a functionalist definition. Within this object of comparison, I argue that those beliefs, practices and agenda are part of Lexism as a corporate institution, which reflects its power political, intellectual, cultural and moral. Riddick, by accepting the concept of impairment, infers an acceptance of the intellectualist doctrine and leaves normative literacy largely unchallenged. Yet in aspects 1 (Othering and discrimination) and 2 (cultural factors) of Riddick's model she begins to question the foundations of impairment, I argue that she may be inhibited by Lexism as a limitation on thought and action.

Lexism as a limitation on thought and action can be related back to arguments I have made in earlier chapters. I argue in Chapter 5, in the thought experiment 'the Dyscomputics', that there is a desire to explain the existence of dyslexics in terms of a disorder. This perhaps arises from Lexism as a limitation on thought, as does the double normativity of literacy I argue for in Chapter 1. We ascribe an arbitrary line between success and failure in literacy, and that we seek to draw a line at all. In Chapter 5, I examine the DMS IV and V (APA, 1994, 2013) and ICD-10 (WHO, 1994), and outline that the necessary and conjointly sufficient conditions for defining literacy difficulties as a disorder are reliant on a discrepancy between intelligence and literacy ability. Another example of Lexism as a limitation on thought is the tendency to explain dyslexia in terms of a discrepancy between

IQ and ability with literacy. Stanovich (2005: 104) calls this the 'discrepancy assumption', pointing out that features of 'dyslexia' have nothing to do with IQ. I argue in Chapter 10, drawing on the work of Ryle (1949: 26-61), that this is a misconception which conflates propositional knowledge of literacy with intelligence.

## **Conclusion**

Within this chapter I provided an extended object of comparison for Lexism, Said's (1978) description of Orientalism. I provided three tables which outline: (i) the key aspects of Orientalism and Lexism, in simplified manner; (ii) the aspects of a corporate institution, flexible superiority and power in more detail; (iii) aspects of Lexism and Orientalism as limitations on thought and action in more detail. I provided a brief overview of Orientalism as an object of comparison. I examined Lexism as limitation on thought and action. I considered different definitions of power: political, intellectual, cultural and moral, with regard to comparing Lexism and Orientalism. I reconsidered the three aspects of Riddick's model, comparing the object of comparison's features with the aspects of Riddick's model. I argued that the key features I identified from Said's description of Orientalism are similar, but not the same as, Lexism. Orientalism and Lexism are both 'isms', so to speak, because of these common features. In this chapter I provided one way of viewing Lexism, in Chapters 11, 12 and 13 I provided *other* ways of viewing Lexism. For those reasons the aspects set out in this chapter are *not* necessary and conjointly sufficient conditions of Lexism, they are family resemblances for how we might conceptualise Lexism in *some* (but not all) contexts. There are numerous possible ways the concept Lexism might be employed, I merely emphasise the most significant aspects with regards to the English education system.

## **Conclusion**

Throughout this thesis I have proposed the concept of Lexism, and rejected the concept of dyslexia. I have argued that dyslexics exist because of Lexism. It is Lexist beliefs that result in the Othering of, and discrimination against, dyslexics. Riddick's model is a strong one, and two out of three of the aspects of her social model of dyslexia are convincing. Dyslexics, as she suggests, are Othered and discriminated against, and she rightly emphasises the importance and influence of cultural context in impacting on the difficulties dyslexics may face. However, as I suggested in Part 2, those two strong aspects actually undermine the third aspect of her model, dyslexia as impairment. It is the specific social or historical context that leads dyslexics to be Othered and discriminated against by normative assumptions and practices of literacy. To illustrate this point, I have used a number of thought experiments, such as the Twins (Chapter 7), an alternative present (Chapter 4) and Three Men and a Time Machine (Chapter 8). In short, the first two aspects of Riddick's social model have enabled me to critique, and thus disregard, her third aspect, dyslexia as impairment.

### **Research Questions**

In the Introduction I posed three research questions:

- 1) What are the features of Lexism as a concept?
- 2) To what extent are the features of Lexism similar, and different, to Riddick's social model of dyslexia?
- 3) To what extent is Lexism a clearer concept to explain the existence of dyslexics than dyslexia?

I will answer each in turn, and then draw attention to a number of key conclusions.

**Research question 1:** What are the features of Lexism as a concept?

My *conception* of Lexism is that it can be divided into philosophical (that is conceptual features), and societal aspects. The philosophical aspects of Lexism are conceptual confusions concerning the relationship between literacy, and understanding or intelligence. These are essentialist misconceptions of literacy, that literacy is a single and simple thing. In contrast I argue that literacy is a complex spectrum of capabilities and practices across different times, and places, conducted for different purposes. Such essentialist misconceptions of literacy can lead to unrealistic normative expectations of full or total literacy (as opposed to mass literacy). Ontological explanations for if, or why, dyslexics exist, and their theoretical basis can be divided into scientific, educational and folk psychology. Those who adopt scientific explanations suggest dyslexia exists as impairment, located within the brain of the individual. Those who adopt educational explanations suggest dyslexia does not exist, and that those who fail to meet norms of literacy do so due to, amongst other things, 'teaching deficits'. Finally, there are aspects of Lexism based on folk psychology, an anti-intellectual explanation, which mistakenly suggests that neither dyslexia *nor dyslexics* exist.

The societal aspects of Lexism exist within a socio-historical context, which includes the given technology of literacy (its medium and means of recording text) and norms associated with literacy in a given time and place. Elite groups may have self-interests in raising norms of literacy which can include economic demands for higher levels of literacy. Within this context there are governmental and bureaucratic reactions to the existence of dyslexics. These can include refusals in the past to recognise or make adjustment for the existence of dyslexics as well as government policies on Education, SEN and literacy which aim at full or total literacy. Official reactions to the existence of dyslexics include



teaching practices which aim at full or total literacy and paternalistic agendas and practices designed to assist meeting those aims.

Another important societal aspect of Lexism is the normative expectations associated with literacy, including the disjunction between the practical and ideological in the technology of literacy in a particular socio-historical context. Normative conservative expectancies and practices of literacy exist alongside unrealistic expectations of a written language. The social consequences of attitudes towards literacy on the dyslexic minority include stigma, prejudice, hostility and contempt. Lexism results in dyslexics becoming alienated, as well as facing higher underemployment, unemployment and high rates of offending behaviour, truancy and educational limitations or failure. The psychological impact can include low self-esteem and learned helplessness. I should stress, this is my *conception* of Lexism in the current English educational context, other conceptions are possible, and indeed desirable, in other contexts and for other purposes.

**Research question 2:** To what extent are the features of Lexism similar, and different, to Riddick's social model of dyslexia?

The similarities between Lexism and Riddick's social model of dyslexia are twofold: first, the Othering and discrimination of dyslexics, second, the importance of the 'culture' (both historical and non-historical). The Othering and discrimination are features of Lexism, as well as Riddick's social model. The historical and non-historical societal contexts in which dyslexics find themselves, not only impacts on the difficulties dyslexics face, but also define who is, or is not, defined as dyslexic. These are features to be found within the societal aspects of Lexism, which I detail above in my response to research question 1. The strength of those first two aspects of Riddick's model, however, enables us to question the third aspect, impairment. Therefore the difference between my concept of Lexism and the

social model is that I reject dyslexia as impairment, whereas Riddick accepts the concept of dyslexia. A notable difference, which would mean many, though perhaps not all, of the philosophical aspects of Lexism, which I outline above, are distinct from Riddick's social model. The aspect of folk psychology, for example, might well be viewed in a similar way if one adopts the social model of dyslexia, or Lexism.

Furthermore, I view dyslexia itself as a Lexist concept, although I would stress not arising from ill-will or any kind of conspiracy. Those with the best of intentions, including dyslexics themselves accept, defend and promulgate the concept of dyslexia as a normative theory.

**Research question 3** To what extent is Lexism a clearer concept to explain the existence of dyslexics than dyslexia?

Lexism, I suggest, is a clearer concept than dyslexia, it enables us to understand the existence of dyslexics as those Othered by normative literacy. The concept of dyslexia as an impairment is problematic for several reasons. First, I reject the belief that one can be impaired in reading at all, one can be good or bad at reading but this is a different matter. Second, a biological impairment in literacy cannot exist in someone's brain. 'Impairment' in reading and writing is not located in a particular biology, but by being *impaired* in doing those particular tasks, in a particular context, for a particular purpose and (in the case of dyslexics) being judged in particular way. I emphasised the mereological fallacy, as it relates to reading (the misconception that brains read, rather than human beings) and the temporal problem of defining dyslexia (what is defined as literacy is different in specific times and places). I have also argued that articulating a definition of dyslexia is based on social judgments, on what success or failure in literacy is, without recognising the importance of social and historical context.

As I have shown, in numerous thought experiments throughout this thesis, that it is *context* which is important in deciding whether someone (including their biology) meets social norms of literacy, or not. I argued in the thought experiments Dyscomputics (Chapter 5), Cannae Rememberers (Chapter 9), and Three Men in a Time Machine (Chapter 8), that basing a definition of dyslexia on a failure to function in a given social *context* is problematic. To ignore social context obscures the roles of elites in creating and maintaining norms of literacy, or indeed normative expectations generally, such as those based on memory or computer literacy, as expressed in the Dyscomputics and Cannae Rememberers thought experiments. Ultimately one can apply Occam's razor, the logical and simplest explanation is more likely to be true. Lexism is a different way of seeing, which enables us to perceive dyslexia as a normative theory, and dyslexics as those Othered by norms and expectations of literacy. This, compared with complex theories of dyslexia, is both more logical and a simpler, clearer, explanation which requires no new information.

### **Key Arguments**

There are a number of key conclusions and arguments I would wish to reiterate. My purpose has been to show a different way of seeing existing information which dissolves, rather than solves the problem of how we define dyslexia. In accepting Lexism as an explanation for the existence of dyslexics, it dissolves the need for *any definition* of dyslexia. My conception of dyslexia, by contrast, is that it is a *normative theory* (or family of normative theories). However, it is not dyslexia as a normative theory which Others dyslexics, on the contrary one might choose to argue an acceptance of dyslexia has led to a recognition of the existence of dyslexics. Scientific research on dyslexia has been helpful in providing empirical evidence for the existence of dyslexics. To be dyslexic is not to

be illiterate in the absolute sense (as opposed to the functional sense of the term), indeed in an absolute sense one has to be literate to be dyslexic. For to be dyslexic is to *be perceived or judged by social norms* to be poor at literacy in a given context, therefore to be dyslexic one has to have been educated in literacy practices and developed *some* ability in relation to those practices.

Dyslexics are, therefore, judged to have failed to meet normative standards or thresholds of literacy in both formal and informal everyday settings. It is normative literacy which is of significance. Normative literacy includes a two pronged conceptual problem. First, the problem of where we draw the line between reading and spelling success or failure, as such distinctions are vague and socially constructed. Second, that we choose to draw a line at all. There are internal conceptual problems within the concept of dyslexia. The problem in using arbitrary (and socially constructed) standards and thresholds of literacy in both formal and informal everyday settings means that both psychological and neurological defences for dyslexia as a concept are inadequate.

Another fundamental misconception within normative literacy has been the tendency to conflate literacy with understanding. I suggest in Chapter 10 that this is a form of the intellectualist doctrine (Ryle, 1949) - a tendency to confuse a capacity for propositional knowledge of literacy with the capacity to understand or engage in intelligent use of known facts. This longstanding belief has led to the assumption that for someone to be intelligent, yet have difficulties in literacy is a strange paradox or contradiction that requires an explanation. Dyslexics exist because they are seen to be defined by this paradox or contradiction. We need to recognise that this paradox or contradiction arises from Lexist assumptions, namely that a capacity for propositional knowledge of literacy *should* coincide with

the capacity for understanding or intelligence. In fact, no such explanation is required because no such strange paradox or contradiction exists.

### **Potential implications of Lexism**

Lexism, as I envision it, has a number of implications in terms of both education policy, and education practice, as well as legal matters such as equities legislation. Further potential implications of Lexism might include teacher education, public education, and changes in lobbying practices. However, perhaps the most important of the potential implications of Lexism is a strengthening of the political, or, social self-awareness for a growing number of dyslexics. A dyslexic who is self-aware of Lexism would be able to challenge it when it occurs, recognise that it is not themselves that are the problem, and be more proactive. A possible consequence of dyslexics being more aware of Lexism is that they may increasingly choose not to take part in psychological or neurological studies of 'dyslexia'. For in recognising 'dyslexia' (or any equivalent term) as Lexist they would, one assumes, naturally reject collaborating with such research. Dyslexics (or significant numbers of them) might choose to become more political and vocal in their criticisms of the education system. However, ideally this would be to work with teacher educators and trainers to improve the system rather than come into further conflict.

Teacher education and educational practices would need to be informed by an awareness of Lexism. It would be necessary first to work with dyslexics, rather than impose solutions. Teachers need to be aware that dyslexics do have genuine difficulties in the area of literacy and memory which have a number of implications, both practical and emotional. However, teachers also need to be aware that dyslexics exists within a context of policy agenda focused on literacy acquisition. It is those agenda which so often Other and discriminate against dyslexics, and

teachers will need to be aware of Lexism to avoid becoming passive enactors of that Othering and discrimination. However, the policy makers need to be aware of Lexism precisely so they do not pass into law education white papers which Other and discriminate against dyslexics. I would argue that the political or social self-awareness of dyslexics is important to challenge such Lexism within policy agenda, and a wider awareness within members of the public would also play an important role to enhance public support against Lexism within such policies.

Education policy currently lays heavy emphasis on meeting the Government's expectations of literacy and this is highly unlikely to change in the short term (see for example DfES 2009, DfE 2010, DfE, 2016). However, if governments were to take into account Lexism they might become more nuanced in their rhetoric and cautious in their expectations. An understanding of Lexism might enable policy makers to see that being open to imaginative approaches to literacy and education might well be more productive. For example, engaging with texts need not have such an emphasis on the printed word, we should be more open minded about the possibilities of e-formats which offer access to texts (and the process of education) for the less literate. This in turn means that educational practitioners should be free to explore different approaches (such as e-formats) to how we might understand literacy and education. It is hard to envision such changes in the current climate but this may alter in time.

The public generally need an awareness of Lexism, in the same way that they need an awareness of racism, sexism and homophobia. There might be a number of means of doing this: public lectures; awareness training in workplaces; leaflets; posters and so on. This kind of publicity campaign (run either by a government agency or a charity) conducted over a number of years would be needed to challenge Lexist beliefs and practices. Such public awareness may

enable a change in practices amongst the dyslexia lobby. It would enable them to continue their work but *against* Lexism, rather than *for* dyslexia. However, in reality bodies, such as Dyslexia Action or the British Dyslexia Association, would be highly likely to be resistant to such a change. Indeed part of the role of such public education would be to put pressure on, or, persuade the likes of the Dyslexia Action and the British Dyslexia Association to accept that dyslexia is a flawed concept, and accept the existence of Lexism instead. Public education of this nature would encourage such dyslexia organisations 'to raise their game', so to speak.

What is designated reasonable adjustment might also change if one accepts that dyslexics are defined by Lexism. Important questions would remain the same, what should be adjusted, why, and how? However, more importantly, attitudes to why we have reasonable adjustment might change. If the task is not to test literacy but academic understanding then the role of literacy as a means of communication and recording information is open to question. It need not be rejected, but on a case by case basis one might wish to reconsider its role and value. There can never be reasonable adjustment for a dyslexic in a spelling test, for example, yet in other areas literacy's role is open to question. We should recognise dyslexics as just not very good at spelling, and this should be treated as just one area of the curriculum. Likewise, how long someone takes to learn to read becomes less important. Access to text in e-based formats will allow education and learning to take place, if at the same time we allow someone to continue to learn to read print-based texts at their own pace.

The practical difficulties faced by dyslexics can impact on their vocational training and access to further and higher education. Certain potential careers can be deemed by some as impossible for dyslexics to do. However, from personal

experience I have met and talked to dyslexics who were senior and capable nurses, published and senior academics, as well as architects, librarians, administrators, and teachers. Following all those professions might be contrary to some expectations and beliefs, but I suspect it is hardly rare. Dyslexics might hide who they are, be exceptionally good at what they do and thereby gain acceptance, but from talking to my fellow dyslexics it is obvious it is significantly harder to get into those professions from an education system that categorised them as failures. A public awareness of Lexism, educated and aware teachers, and policy agenda which was more thoughtful, might go a long way to making those transitions more bearable. In subjects and disciplines with shortages, like Mathematics and Engineering, this would benefit not only dyslexics, but society as a whole.

### **Concluding remarks**

Throughout this thesis I have sought to argue that a dyslexic is defined by Lexism, not dyslexia; indeed dyslexia itself is a Lexist concept. Lexism is similar but not the same as racism, sexism and homophobia. We recognise those with average or above average intelligence, weaker literacy skills and short term or working memories (dyslexics). As such we can say that dyslexics exist, the question is why do dyslexics exist? Is it because of dyslexia or, as I suggest Lexism? I have argued that criticisms of dyslexia are justified, and Lexism is a simpler and clearer way to recognise the existence of dyslexics. We do not need recourse to the concept of dyslexia to explain the existence of dyslexics. We need to go beyond the social model of dyslexia, we need to recognise the existence of Lexism.



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